

# MICHIGAN FARMER

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## THE MICHIGAN FARMER,

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The attention of Breeders of Stock, Nurserymen, Florists, Feedmen and Agricultural Implement Manufacturers, as well as those who wish either to buy or dispose of farms or farming lands, stock, &c., is particularly called to the advantages which a circulation of nearly 10,000 offers to them throughout the state of Michigan.

JOHNSTONE & DUNCKLEE.

## Flax—Its Culture and its Profits.

The accumulation of capital in the hands of eastern men, whose active business habits will neither allow them to be idle, nor to let their wealth remain unproductive, leads to continual attempts to introduce into the country new kinds of manufactures, and to the erection of establishments in which they can be carried on to advantage.—Among the most recent, and certainly among the most useful, is the organization of a company at Fall River, Massachusetts for the purpose of spinning and weaving of flax into fabrics which we have now chiefly to import from other countries, and for which a very large amount of gold and silver is each year carried out of the United States. It is true that a large portion of the linen imported is consumed in the cities, but these cities are growing rapidly throughout the land from the Atlantic to the Pacific both in numbers, and in population, so that the market for linen fabrics may be considered only as yet in its infancy. The value of the articles of linen annually imported into the country now exceeds ten millions of dollars, and the measurement over fifty millions of yards, an-

nually; and the manufacturers' prices have increased nearly ten per cent within the last year or two, owing to the enhanced price of labor where the manufactures are most successfully carried on. Considerations upon the above facts have induced the formation of an "American Linen Manufacturing Company," with a capital of \$500,000, of which \$300,000 has already been paid in, and invested in the buildings and machinery necessary to carry on the proposed manufacture at Fall River. The Company have been in operation about a year, but find themselves at a loss for a supply of the raw material, which is not to be had, and on which a duty is payable when brought from foreign countries. The British Islands not producing enough to supply their own manufactures, and depending upon Russia, Prussia, and Holland for a large part of the raw material they work up and export, allow it to be brought into their ports almost free, so that very little is brought to the United States. This state of matters has induced a gentleman, connected with the "American Linen Manufacturing Company," to make a tour to the West, with the idea of calling the attention of Western Agriculturists, and of some of the leading men of the several States to the market which is about to be created for this staple. In a letter addressed to Governor Wright of Indiana, on this subject, he says:

"We expect to consume in the ensuing twelve months, over six hundred and fifty tons of Flax fibre, (1,300,000 lbs.;) and when in full operation, shall consume annually over one thousand tons, or two millions of pounds. Being about commencing operations, we have already been obliged to import from abroad over one hundred tons, at an expense of over \$30,000."

"Now in passing through your State and that of Ohio, in company with my friend, Charles Harts-horne, who has also paid considerable attention, abroad and at home, to the flax culture, we have found that many thousands of acres of flax are grown for the seed alone; the stalk and its fibre being entirely wasted and thrown away. We have found that the farmer, on an average, obtains about ten bushels of flax seed to the acre, which has

yielded him from 90 cents to \$1.25 per bushel, and often a much less price. Now in the first place, this is hardly a *half crop* of the seed. In Great Britain and Belgium they obtain from 20 to 25 bushels of the seed, besides saving the fibre. The secret lies in the *proper preparation of the ground* before sowing the seed."

He then goes on to give a few very brief observations on the proper mode of cultivation to be pursued by those who would grow it more profitably and with the design of reaping the whole benefit of the crop.

We are not aware that the cultivation of the flax plant (*Linum usitatissimum*,) has been tried to any great extent within the bounds of this State. At the State and Agricultural Fairs we notice that awards of premiums have been made for home-made diaper and for pieces of tow cloth, but no premiums have been given, nor have any been offered for growing flax. Premiums have been paid for growing flax seed, but not for the fibre.

As a crop well fitted to enter into a rotation suitable for the State of Michigan, it is somewhat surprising that attention has not been directed to it before; but then we must consider that heretofore the market has not been such as to make the demand for this article of such a nature as to create any desire to cultivate it. Now, matters are changed, and the agent of the American Linen Manufacturing Company, says in the letter which he writes to the Governor of Indiana, as follows:

"If the farmer would sow two bushels or two and a half to the acre, on rich ground so prepared, he would, while obtaining twenty bushels of seed, also obtain two tons to two and a half tons of flax straw per acre. At present with the poor preparation and thin sowing, not over one or one and a quarter tons are obtained on an average. Every ton of straw yields three hundred pounds of flax fibre, so that he would then obtain, if he chose to rot and prepare it, as was done in the days of our grandfathers, about six hundred or six hundred and fifty pounds per acre of flax fibre rotted and scutched. *For this fibre we would gladly contract for two years to come, at the rate of 12 1-2 to 15 cents a pound, (\$250 to 300 per ton,) according to quality.* It costs us this price, cash, to import it, and we should much prefer paying it to our own industry."

The soil of the greater part of Michigan, we have good reason to know is eminently adapted to the growth of flax; at least there would be no more difficulty in growing it here than there is in New York or Iowa.

We are well acquainted with a farmer of Rensselaer county, in the State of New York, who has raised from 10 acres to 50 acres per year for the last ten years. In the poorest seasons he has 350 pounds of flax to the acre, and fourteen bushels of seed. The flax he sold for 10 cents per pound, and the seed at ten shillings per bushel, giving him a clear profit of about \$35 per acre, after paying all expenses of rotting, scutching, and

cleaning. This is a good deal better than growing wheat at a dollar a bushel or even a dollar and twenty-five cents.

Mr. W. G. Edmundson, of Iowa, wrote to the *Albany Cultivator*, in 1852, that he had grown frequently as high as fifty acres of this plant, and found but little difficulty in growing it on rich soil preceding wheat. He says with ordinary cultivation and a proper regard to the nature of the plant there is no difficulty in raising from fifteen to twenty bushels of seed, and from three to four hundred pounds of good clean scutched flax. Here is testimony from both the East and the West as to its produce, and we publish the offer of the agent of the Fall River Company to contract for all that is offered. The manufacture of linen in this country is just begun. It will be found to be as profitable as any other, all that is now wanted is a supply of the raw material. In last year's volume Mr. Isham called attention to the fact that there was exhibited at the Crystal Palace in New York, a flax pulling machine as well as new inventions for dressing the flax after it was pulled and rotted. These inventions show that an increased interest is felt in the cultivation of this plant, and that the manufacture from its fibre is coming into greater and more extensive demand. In this number of the *Farmer* we call attention to the fact. In our next we shall have something more to say relative to the modes of cultivating the crop, and of preparing the land, the seed for market, with the expense attending the raising of a crop, and its utility as applicable to form a part of an excellent system of rotation suitable for the farmers of this State. In the meanwhile we invite our readers to forward to us their own experience in growing this crop. There is no learning for the farmer, like that which comes from his own neighborhood; and while we do our duty in keeping our readers posted up in all that concerns their interests transpiring abroad, we look to them and to their correspondence for advice and assistance relative to home matters. Friends—we want your experience in flax culture for the benefit of the public. Shall we have it?

### The Osage Orange and Hedges.

We have received several letters of late asking for information as to the qualities of the Osage Orange for hedges, and whether hedges formed of it were profitable fences; whether they would answer in our State as well as they seem to do in more southern ones; and many more questions of a like nature. In Michigan, as in some of the States to the south of us, it must be recollected that there is no scarcity of timbered lands. Nearly all farms are situated so as to be convenient to wood lots, and the universal mode of separating lots is by the worm rail, a fence that is cheap, easily repaired,

easily put up, and easily moved. Of late years, the post and board fence has been taking its place on the best farms, and among those farmers who pride themselves on the neat appearance of everything around them. There are but few localities, therefore, where the want of hedges is felt in Michigan, for though we have prairies in our State, they are small, very small, in extent when compared with the broad expanse covered by the prairies of Illinois and Indiana, and where any substitute for a substantial fence would be readily welcomed.

The osage orange, which has been recommended by a number of writers as a plant well fitted for hedges, is a native of the south western States. It grows in great abundance in a wild state in Arkansas, where it takes more the form of a tree than a shrub growing to the height of thirty or forty feet, with a wide-spreading head.

The osage orange belongs to that class of plants which have the male and female flowers on separate trees; the female tree alone bearing the fruit, which has a strong resemblance to an orange, whence arises its name. The foliage also resembles in some degree that of the orange, but is rather more glossy and polished, and of a brighter green. We give a cut showing the leaf, the spines, or

thorns, with which it is armed, and which render it so excellent as a hedge plant, and the flower of the female tree which bears the fruit.

The osage orange has been found hardy enough to stand the winters as far north as where the Isabella grape is found to ripen its fruit. It grows well in the latitude of Detroit, and probably as far north as Port Huron and Grand Rapids, if tried; though we do not know that any attempts have yet been made to cultivate it so far north, either for ornament or use. It grows readily in this vicinity, the frost only affecting the young shoots which have to be trimmed off in the spring.

To raise plants from the seed is the readiest mode of obtaining them in such numbers as may be wanted. The business of raising them in nurseries has increased largely, so that those who do not choose to wait for a season and raise their own plants, may now obtain them ready for setting out in hedge-rows in any quantity, at moderate prices. To raise the plants from seed, it is only necessary to choose any good piece of rich mellow garden soil, that is clean and free from weeds; have it dug thoroughly, and give it a good coating of manure. After it is raked and levelled, open drills through it, about two and a half or three feet apart, and sow the seed just as peas are sown, each seed being from about two to three inches distant from each other. The seed may be covered from about an inch to an inch and a half with earth. The seeds are generally sown in October, and the young plants make their appearance in the spring; after which, all the work that is necessary is to keep them clear of weeds and grass. In a single season they will be ready to transplant into the hedge-row. It is estimated that a quart of the seed will grow about a thousand plants. It may now be obtained in great plenty at any of the seed-stores.

Of late much discussion has arisen as to whether the osage orange was really as serviceable to those who have actually tried it, as it is said to be by those who have written about it for speculation. At a meeting of the State Agricultural Society of Ohio, held at Columbus on the 7th of December, the subject of hedges, and particularly osage orange hedges, was brought before the meeting, and discussed. The following extract from the proceedings will give some idea of the objections made to this species of fencing. It will be noted that the principal objections came from persons who admitted they had never given the plant a fair trial.

Mr. Millikin offered the following resolution:

*Resolved*, That the State Board of Agriculture be recommended to offer premiums, for the best specimens of, and the best mode of cultivating osage orange hedges.

"Mr. Gamble, of Richland, advocated the passage of the resolution, detailing in a clear manner his experience in hedging, in a speech to which the Convention listened with much interest. He does



No. 5. Branch of the Osage Orange.



not approve of clipping or trimming the hedge until it has attained the desired height.

"Mr. Springer thought that hedging is unsuited to the condition of things in this country. He was formerly well acquainted with hedging in New Castle county, Delaware, and has watched hedges with interest. He has no experience with the osage orange, but thinks it will be a *morus multicaulis* operation.

"Mr. McGrew, of Montgomery, thought the osage orange will succeed. He had tried it, and approves of it. The failures are because the plants have not been properly set and attended to. He sets his plants six to eight inches apart, lets grow one year and then cuts off at the root. The shoots then come up thick and strong, and make a firm protection. The second cutting is made three inches above the surface. Frequent cutting is necessary. On thin soil the land should be thoroughly cultivated. The hedge should have a wide base, at least four feet when full grown. He thought experience more valuable than opinions without it.

"Mr. Anderson thought all the hedging ideas were humbugs. There is no shrub or tree that will alone make a protective fence. He believed that all the trees that belong to a country should be planted in the hedge, all mixed up together; but he admitted he has not tried osage orange.

"Mr. Worthington had examined hedges in this country and in England, and has had 33 years' experience. He has one hedge, of native white thorn, which will turn the wildest bull. But as a practical measure, it is a humbug, because it wont pay. He has not tried the osage orange.

Mr. Green, of Hamilton, said the south-west of the State had been slandered, as we have hedges, and good ones. He stated the manner of starting the osage orange hedge. He prefers the plants two years old before transplanting. He puts them eight inches apart, the first year cut within two inches of the ground, the next year within three or four inches. Down in Hamilton, we need hedges to keep out the thieves, who plunder our fruit.

"After some further discussion the resolution was adopted."

The principal objections to the osage orange are that it grows too vigorously, especially in rich ground, and that after the first five or six years it will take too much labor to keep it trimmed and within bounds. Another objection is, that it being a very vigorous grower, it sends its roots out in every direction, and thus occupies too much land, robbing the crop that grows near it of the food and moisture which is necessary for its maturity. The editor of the *Indiana Farmer* also claims that it is a mistake to say that no animal will browse on it, for he turned a flock of sheep into a pasture fenced with a hedge of it, which had been just trimmed, and he had to take them out, as they fed on the young shoots very greedily. In this case, we are inclined to think the pasture could not have been very tempting.

Mr. J. B. Turner, of Illinois, writes to the *Prairie Farmer* as follows concerning the economy of the osage orange hedge:

"I have a little farm of about 150 acres, ten miles from this place, now nearly surrounded and

subdivided into twenty acre lots by this hedge, with gardens, stock lots, house and fruit lots of smaller dimensions. Parts of the hedge are not yet fully grown, and the fences are still standing—but I have given notice to my farmer, already, that if he finds any person hereafter bringing old rails, boards, or wood of any kind upon the premises, under pretence of making a fence, to prosecute such persons at my expense, for damages, at once; for I will not have the premises or any part of them disfigured in that way. Or, if he himself cuts the timber belonging to the place with any such malice prepense, I shall at once prosecute him. This injunction covers all gardens, stock yards, fruit yards, and all enclosures of whatever sort made upon the place under my directions. I will never allow another rail or board of any sort to be brought upon the place for any such malicious purpose.

"Now for the figures:

"To make all these enclosures in the best and most convenient manner I can devise, will require about four miles of hedge or other fence.

"It would be impossible for me to obtain the cheapest sort of rail, or wood fence, for less than three hundred dollars per mile. This would, of course, make a bill in the outset of \$1200.

"On the other hand, the hedge well set in the ground, at the price plants now sell at, would cost, not to exceed \$25 per mile.

"Here then is, to start with, a clear difference in cost of \$275 per mile, or of \$1000 in the four miles when first put on the ground. The annual interest of \$1000 is, of course, \$100 in this county. Now this \$100 will hire me a good, smart young man to tend my hedges, and board him five months in the year. Now if in all coming time, I hire a man and keep him to take care of the hedges, and he does nothing else for five months in the year, it is evident that the rails and the hedges would, on that score, just balance in actual cost.

"But on the other hand it should be considered that it will take from three to four years before the hedges will be sufficient to turn stock. We will say the extreme four years. Here there is a loss of \$400 interest for which the hedge makes no return, but the rails do.

"To offset this, it should be considered that about \$400 worth of the wear of your rails will be gone in that time; for the whole fence will be virtually gone in twelve years, or as our rails usually are now, in less time than that even; while your hedge at twelve years old, thus taken care of, will be fifty per cent better than it was at four years old.

"But again, instead of its requiring a hand five months in the year, it does not require one. one month, even in the most laborious and difficult part of the process, to take care of the hedge in the best manner—and after the third or fourth year it does not require the half of that, for any man that can swing a splasher can trim a half mile of hedge, well enough for any farming purpose, in a day, and an expert hand will trim a mile; and whenever suitable horse power shears are introduced, the cost will be still further diminished.

"In balancing my estimates of cost between the hedge and rail fences on my place, I cannot make it come out any other way than that I shall, on the whole, in the long run, be as well off at least, with the hedges, and a good man hired five months in the year to take care of them, as I should be with a wooden fence, in point of cash cost. But in point



of security and beauty there is of course no comparison. But all know well, who know anything about it, that it will not cost me even a fifth part of that labor, on an average, to take sufficient care of the hedges, even with the imperfect tools now in common use.

"Here then is a clear saving of \$80 per annum, and at the end of ten, or at most fifteen years, there will accrue another saving of at least the whole cost of the rail fence, which will all be decayed and gone, while the hedge will be better than ever before. Here, then, is another saving of \$1200 more, or, \$100 per annum or thereabouts."

In relation to the comfort derived from the ability of a four year old hedge to keep out all intruders, he says further:

"I can only say that I now write with my eye resting upon a hedge about four years old, between my garden and fruit lot, and the most public street in this county, through which thousands of mules, and wild Missouri steers, hogs, sheep, &c., are driven every year, and all the stock of this village, of all sorts, run at large. (And Pharaoh of old knew what a starved town cow was.) In this hedge is a small wicker gate, opening into the street, with an osage crab over it to prevent climbing. When necessary this gate is kept locked. In this lot, which is within the corporation limits, and contains some four acres, we have had through the season the greatest abundance of strawberries, gooseberries, currants, peaches, pears of the finest varieties, grapes, raspberries, plums, cherries, blackberries molons, &c., and if any person has been inside of the lot without leave, it is certain they did not get over the hedge; or if any boy has taken a plum or a berry we do not know it."

Mr. Turner observes that many farmers have been disappointed in the growth of this plant, because instead of having a thick hedge, that would serve as a fence, they have grown nothing but a row of sticks that would serve for bean poles. The fault has been, he thinks, and we are very sure that it is, with the farmers themselves, who have found it was too much trouble to take care of it, and to prune it and trim it in the first stages of its growth. A rapid growing plant like the Maclura or Osage Orange, needs the pruner to be ready in both spring and autumn with an unsparing hand. In relation to planting and taking care of a hedge, the following directions by the late A. J. Downing are the best we know of, relative to the subject; and if properly followed will ensure a first rate fence in this latitude.

#### PLANTING AND REARING THE HEDGE.

"Having secured the plants, the next step necessary is to prepare the ground where the future hedge is to be formed.

"For this purpose a strip must be marked out, three or four feet in width, along the whole line where the hedge is to grow. This must be thoroughly trenched with a spade, eighteen inches deep, if it is to be a garden hedge; or sub-soil ploughed to that depth, if it is to be a farm hedge. We know many persons content themselves with simply digging the ground in the common way, one spade deep; but we take it for granted no reader of ours will hesitate about the little additional trouble of properly trenching or deepening

the soil,\* when they may be assured that they will gain just one-half in the future growth and luxuriance of the hedge.

"It is the custom in England to plant hedges on a bank with a ditch on one side, to carry off the water—and some persons have, from mere imitation, attempted the same thing here. It is worse than useless in our hot and dry climate. The hedge thrives better when planted on the level strip, simply because it is more naturally placed and has more moisture. If the bank and ditch are used, they are continually liable to be torn away by the violence of our winter frosts.

"As regards the season, the spring is the best time for the northern—the autumn for the southern. Autumn planting at the north often succeeds perfectly well, but the plants must be examined in the spring; such as are thrown out of place by the frosts require to be fixed again, and this often involves a good deal of trouble in strong soil. Early spring planting, therefore, for this latitude is much more preferable on the whole.

"The plants are now to be made ready. This is done in the first place by assorting them into two parcels—those of *large* and those of *small* size. Lay aside the smaller ones for the richest part of your ground, and plant the larger ones on the poorest of the soil. This will prevent the inequality which there would be in the hedge if strong and weak plants were mixed together, and it will equalize the growth of the whole plantation by dividing the advantages.

"The plants should then be trimmed. This is speedily done by cutting down the top or stem, to within about an inch of what was the ground line (so that it will, when planted again, have but an inch of stem above the soil), and by correspondingly shortening all the larger roots about one-third.

"If you have a good deal of planting to do, it is better to bury the plants in a trench close at hand, or *lay-them-in-by-the-heels*, as it is technically called, to keep them in good order, till the moment they are wanted.

"The hedge should be planted in a double row, with the plants placed, not opposite to each other, but alternate—thus:

\* \* \* \* \*

"The rows should be six inches apart, and the plants one foot apart in the rows. This will require about 32 plants to a rod, or 2000 plants to 1000 feet.

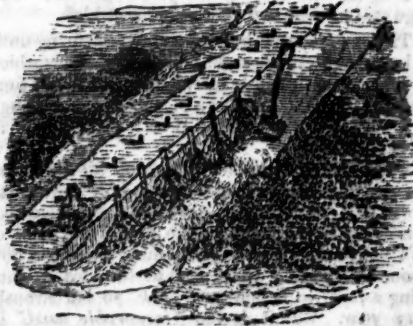


Fig. 6. Manner of Planting Hedges.

\* Those who may be fortunate enough to possess deep rich bottom or alluvial lands, are the only persons who need not be at the trouble of trenching their soil.

"Having well pulverized the soil, set down the line firmly for the first row, and with a spade throw out a trench about eight or ten inches deep, keeping its upright or firm bank next to the line. Drop the plants along the line at about the distance they will be needed, and then plant them twelve inches apart, keeping them as nearly as possible in a perfectly straight line; for it is worth bearing in mind, that you are performing an act, the unimpeachable *straight-forwardness* of which will no doubt be criticised for a great many years afterwards. Press the earth moderately round the stem of your plant with the foot, when the filling in of the pulverized soil is nearly completed. And, finally, level the whole nicely with the hoe.

"Having finished this row, take up the line and fix it again, six inches distant; open the trench in the opposite direction, and set the plants in the same manner. This completes the planting. The next point, and it is one of great importance, is the *cultivation* which the young plants require till they become a hedge. It is indeed quite useless to plant a hedge, as some persons do, and leave it afterwards to be smothered by the evil genius of docks and thistles. A young hedge requires about the same amount of cultivation as a row of Indian corn. The whole of the prepared strip of ground must be kept loose with the hoe, and free from weeds. Then light dressings for two or three summers will be required to effect this, and the thrifty and luxuriant state in which the plants are thereby kept, will well repay it, to the eye alone. After that, the branches of the hedge will have extended so, as in a good degree, to shape and occupy the ground, and little more than a slight occasional attention to the soil will be required.

"A few words must be given to the trimming and clipping of our now established hedge.

"The plants having, before they were planted, been cut off nearly even with the surface of the ground, it follows, that, in the ensuing spring, or one year from the time of planting, they had made many shoots from each stem. Let the whole of this growth, then be cut down to within *six inches* of the ground.

"The following spring, which will be two years of growth, cut back the last season's shoots, leaving only one foot of the current season's growth. This will leave our hedge, altogether, eighteen inches high.

"The third year shorten back the tops so as to leave again one foot of the year's growth. The hedge will now be two and a half feet high.

"This course must be pursued every spring until the hedge is of the desired height and form, which will take place in five or six years. The latter time is usually required to make a perfect hedge—though the Buckthorn will make a pretty good hedge in five years.

"This severe process of cutting off all the top at first, and annually shortening back half the thrifty growth of a young hedge, seems to the novice, like an unnecessary cruelty to the plant, and trial of one's patience. We well remember as a boy, how all our indignation was roused at the idea of thus seeing a favorite hedge "*put back*" so barbarously every year. But it is the "*inexorable must*," in hedge growing. Raising a hedge, is like raising a good name; if there is no base or foundation for the structure, it is very likely to betray dreadful gaps at the bottom before it is well established. In

a hedge, the great and all important point is to make a broad and thick base. Once this is accomplished, the task is more than half over. The top will speedily grow into any shape we desire, and the sides are pliant enough to the will of him who holds the shears. But no necromancy, short of cutting the whole down again, will fill up the base of a hedge that is lean and open at the bottom.\* Hence the imperative necessity of cutting back the shoots till the base becomes a perfect thicket.

"The hedge of the Buckthorn, or Osage Orange, that has been treated in this way, and has arrived at its sixth year, should be about six feet high, tapering to the top, and three feet wide at the base. This is high enough for all common purposes; but when shelter or extra protection is needed, it may be allowed to grow eight or ten feet high, and four feet wide at the base.

"In trimming the hedge, a pair of large shears called hedge shears, are commonly used. But we have found that English laborers in our service, will trim with double the rapidity, with the instrument they call a "*hook*." It may be had at our agricultural warehouses, and is precisely like a sickle, except that it has a sharp edge.

"When the hedge has attained the size and shape, which is finally desired, it is not allowed to grow any larger. Two shearings or clippings are necessary, every season, to keep it in neat order—one in June, and the other at the end of September.

"Counting the value of the plants in the commencement at five dollars per thousand, the entire cost of the hedge, at the end of the sixth year,—including planting, cultivating, and shearing in the best manner,—would here be about seventy-five cents a rod; which for an everlasting fence, and one of so much beauty, we think a very moderate sum."

**AN IMPROVED HORSE RAKE.**—Mr. David Mills called upon us a few days ago with a model of Zenas Sanders' Improved Vibrating Horse Rake. These horse rakes are light, and spoken of as most excellent implements. The rake itself is a beam or axle, to which are fastened the teeth, which are made of fine light steel rods, curved somewhat in the shape of a figure of 5. The beam or axle to which the teeth are fastened runs on wheels, and the teeth are of such a size that the rake may be put on the fore wheels of a common lumber wagon. The gearing of the shafts to the rake, however, is one of its chief features. The driver sits, or stands partly on the shafts and partly on the rake, and the alteration of his weight from the rake, or rather from the wheels to the shafts, causes the rake to empty itself instantaneously, and the rider, by the use of a leather strap, and by letting his weight rest again on the rake, as quickly brings it into place again. David Mills & James H. Hemmingway, of Hadley, Lapeer county, have bought the right of manufacture for this State, and are making preparations to furnish a supply for next season's haying.

\**Flanking* is a mode of interlacing the branches of hedges that are thin and badly grown, so as to obviate the defect as far as possible. It need never be resorted to with the Buckthorn, when a hedge is properly trimmed from the first.

**A good Plan to manage Manure.**

MR. EDITOR:—As there is much being said and written on the subject of 'stabling stock, manure, housing manure, &c., &c., I propose to give my plan, as I think 'it applicable to the circumstances of many who, though like myself, move and operate on a small scale, yet will find the plan is a paying one.

My barn, then, is a common driving floor, with hay-mow over head, a row of stalls along one side, and a granary and feed-room along the same side, in front of horses' heads, a partition separating them, forming the back of the hayrack, and mangers under it; there is a basement story under the whole barn, a row of stalls under the upper stalls, except that the lower one is set forward of the upper ones, so that the drippings from the upper stalls fall some distance behind the horse in the lower stalls, falling into a plank trough, which is placed under the lower edge of the floor of the lower stalls, catching the liquid from both upper and lower stables. Both floors are considerably slanting from the front to the rear, about five feet behind the horse, so that the trough catches all drippings or liquid manure of both upper and lower stables. Into this trough I put manure, black muck (after bedding my cows with it), and anything I can get to absorb the liquid. The solid manure from the upper stable is put down into the centre of the lower stable, through a trap-door in the driving floor, so that it is out of the sun and storm, and does not bleach; when enough accumulates to be cumbersome, I back a wagon in and haul it out to the compost heap, or wherever I want it.

In one corner of this basement, opposite the stalls, I have my storage for turnips, ruta bagas, carrots and mangold wurtzel, for feeding cattle. I put them down through a trap-door in the driving-floor, near the door, so that on driving in a wagon-load just inside the barn, I take out the tailboard, and scoop them into the storage below through this trap-door, where they remain secure and convenient for feeding out to my cows and calves.

By this arrangement, I save all the manure of both stables in good condition, secure from waste by sun, frost and rains—in which condition I think it worth double—and it pays well, as I think. I sometimes draw black muck, and also leached ashes, and drop it through the barn floor on to the manure heap, besides composting the whole after it is drawn out, manure from the stable, black muck and ashes, and sometimes lime, constitute my compost heap. Respectfully, &c.,

JACKSON, Jan., 1854.

J. T. WILLSON.

[Mr. Willson has hit upon a convenient and economical plan of making the most of his manure, and it is worthy the attention of those building barns, either on a large or a small scale.—Ed.]

**Milking—Care of Milk.**

We copy the following article from a late number of the Boston Cultivator:

"Faithful milkers are an important aid to the dairy farmer. Much depends on the mode of drawing the milk.

The first requisite is good temper. If the milker begins by scolding, fretting, and kicking, the cow will be most likely to retaliate—and as cows cannot be forced to give down their milk, they will be most likely to prevail in a contest with the milker. It is better to coax the cows out of their milk than to attempt to force them.

There are cases where a vicious cow should be whipped and made to yield—as there are cases among mankind where force is the only corrective. But generally speaking, mild treatment is the best, for you may expect but little milk at the time you see fit to correct a vicious cow.

The milker should sit close to the cow, and his left arm should always rest against the leg of the animal; then she will not stand so good a chance to set her foot in the pail. She cannot strike hard with her foot when the object of her attack is pressing against her leg.

When the milker is well seated by the cow, the milking should be commenced immediately, for, although cows like to have the full udder relieved, they want it to be done in a diligent manner. They will run away if the milker is a trifler.

In about half a minute after commencement, the milk will begin to flow freely—then it must be drawn out as fast as possible—for any delay is sure to diminish the quantity of milk. If it is not drawn out directly it retires back into the milk veins.

Therefore let there be no talking among the milkers, for they cannot hear each other while the milk is streaming into the pails—they are obliged to stop to hear what a fellow-milker is saying.

It is important to draw out all the milk that comes into the udder, for the last drawn is much richer than the first, and further, if any milk is left undrawn, it tends to diminish the quantity at the next milking, and the cow will sooner become dry.

Yet the milking may be continued too long, and the cow may become habituated to a bad practice of holding back her milk to accommodate her slow milker.

As soon as the milk is brought into the house it should be strained into pans—for if it is allowed to stand till cream rises, a part of that cream will lodge in the strainer and go to the hogs.

Cream rises better in a good dairy room above ground than in any cellar that can be contrived; and it is only when the weather is very hot that a cellar is needed for milk pans. Milk may be kept longer in cellars, but the cream does not rise so fast and there will not be near so much of it.



The chief part of the cream rises within 24 hours, and this is better than the remainder; therefore some people skim their milk twice and have two kinds of butter.

On churning, it is quite important to begin with the cream at the proper temperature. We incline to think that most our dairy folks go it by guess—some having the cream so warm that the butter comes too soon, that is, a part of the butter—for when the temperature is too high a part of it remains with the buttermilk.

On the other hand, if the cream is not warm enough, the process of churning is quite tedious, and the operators are disposed to add warm water or to create a heat in the churning room after despairing of success.

Accordingly we hear of churnings which last for hours, and of butter that comes white and in small quantity. All this may be remedied by the use of a proper thermometer, which should not cost more than one dollar. The cost would be repaid in a single churning.

There are now churns with thermometers attached to them. Some of these have proved poor things. But there need be no attaching of the glass to the churn. It may be quite independent of it.

Let the thermometer be made in so simple a manner that it may be thrust into the cream as often as one pleases. There could be no difficulty in washing a thermometer made with a very simple frame.

With a very little practice, any woman would be able to tell accurately how warm the cream should be in order to turn out the most and the best butter. She would not look to philosophers to teach her the philosophy of churning, for she would not find any to agree as to the proper degree of heat.

Somewhere from 60 to 62 deg. seems to be the opinion of speculators. Can we not have a rule rather more definite when butter-makers shall be in the practice of trying what degree of heat is best?—*Maine Farmer.*

#### Reasons for supplying Cattle with Water in their Yards.

If water cannot be obtained by cattle without going out of the yard, they will many times suffer exceedingly for the want of it, rather than go for it in very bad weather. If good fresh water can be had by them without going out of the yard, they will drink very much oftener than in the other case, especially in cold weather. The oldest and strongest cattle will generally go first to water; and when they have drunk, and are returning, they will meet the young cattle in the narrow snow path, and of course will drive them back; in which case the youngest and feeblest of the herd will have much

trouble and vexation in obtaining water at all. When cattle go to a spring to drink, especially if the snow is deep, there will generally be great difficulty in reaching the water on account of the bank of snow and ice, without stepping into it, which cattle are loth to do if they can help it; many watering places are so steep that cattle are compelled to go down on their knees before they can reach it, and even then, they obtain it with the greatest difficulty. The cattle on many farms are obliged to travel from one-fourth to half a mile for water, and when they arrive at the spot, it is often only to be obtained by them through a hole cut in the ice, perhaps from a foot to eighteen inches in thickness. The amount of manure which is dropped and lost on such occasions is very considerable, and much of it is washed down by the rains into the hole at which they are doomed to drink, where it forms a coffee-colored beverage, awful to behold. Every good farmer will esteem this as a matter of no light importance, considering that all the manure ought to be saved, and calculating that the food of cattle might as properly be wasted as the food of plants. It has been thought that the exercise of going to water at a considerable distance, is advantageous in preventing the hoof-ail in cattle; but it is much more likely that this disorder often arises from the filth in wet weather, and freezing of the feet in very severe weather, to which they are exposed in their walks to the spring. If cattle are kept in well-sheltered yards, with sheds for their protection, with uninterrupted access to good water, plenty of salt and warm beds of dry straw, it should not be too much to promise that they will remain free from the foot-ail and every other "ail" of which we have so much complaint. There is a strong prejudice against wells for the supply of water in cattle yards, and there is a much stronger prejudice against the labor of pumping the water for them; but to an industrious man, the "prejudice" of a desire to furnish his cattle with a clean and wholesome beverage, cool in the summer and warm in the winter, will be stronger than either.

#### The New York Exhibition.

FRIEND JOHNSTONE:—I will now proceed to give some further *inklings* of the Crystal Palace, or rather of its contents.

All have read or heard of Atkins' *self-raker*, and some have seen that wonderful piece of mechanism stretching forth its arm, gathering up the grain, and then, with its two hands, laying it off for the binder, an operation performed by the same power which cuts and deposits the grain upon the platform. This machine constitutes one of the greatest attractions at the Crystal Palace.

But it is not alone in its glory. There are two other *self-rakers*, which, though not its equal as a

curiosity, are contesting the prize with it. One of these is the invention of G. Denton, Peoria, Illinois, built upon the cutting principle of Hussey's, with a wheel like McCormick's, and takes a breadth of eight feet. The grain falls upon a cloth band, which, revolving, passes over the platform, and is thus carried over the gear and wheels, and deposited in a receptacle, from which, when filled, it is dropped for the binder. This machine is rather heavy, requires four horses, and cuts twenty-five acres per day.—Cost, \$160.

There is still another self-raker which operates in this wise; the rake (6 or 8 feet long) is fixed at one end upon a pivot, as in the centre of a circle, and in sweeping round the quarter of a circle (the other end moving in the circumference), sweeps the grain from the platform, and then, being raised, it returns, descends again, and takes another sweep, the grain being thus laid in bundles behind the machine.

Which of these contrivances will ultimately take the precedence, remains to be seen; but that we are on the high road to a successful result, scarcely admits of a doubt.

But what next? Is it possible to go further? Can more be asked, than that a machine should both reap and rake for you? Will you ask it to do your binding also? Lazy man! Did presumption ever go so far? Would you have nothing left to keep you out of mischief? Is it not tempting Providence to indulge in such wantonness? Israel asked a king to relieve them from the trouble of governing themselves, and in anger a king was inflicted. And I have no doubt, that our farmers would be glad to have a machine sent among them to bind their sheaves for them, as well as to reap and rake. Take care! Such a machine may be among you before you are aware. It has already made its appearance in the Crystal Palace; that is to say, the model of a machine having some of the attributes of a binder, and struggling for more, is certainly there. It is a curious object, with non-descript cranks, balancing knives, cam motions, &c. &c., the whole being divided into two independent parts, hinged together, so as to adapt itself to uneven surfaces like a hinge harrow. The grain falling upon the platform of one half, is raked to the one side, and of the other half, to the other side, where it falls upon bands, a bundle at a time. Each bunch thus prepared for the finishing tie, is conveyed to the hindmost part of the platform, where the ends of the band are locked together, with such expedition, that it is out of the way in an instant, giving place for the next bunch, which comes on without any waiting.

This machine is quite a curiosity, and though it may not perform all its promises, in its present inchoate state, it is not improbable, that the plan may ripen into something practicable in the end.

But a greater wonder than the machine itself is, that it should have such a birth-place. It is from California. That there should be a man in all California, where all eyes are dazzled by the glittering dust, all hearts do it homage, and all hands are engaged in its service—that a man should be found there, immersed in such influences, capable of such abstraction, and such triumphs, is indeed the greatest wonder of all.

There are some other curious machines on exhibition. Among them is what is called a Potato-digger. A cylinder, bristling with long iron spikes, or fingers, and borne on wheels, whose gearing turns it, as it revolves, forks out the potatoes, carrying them, dirt and all, over on the opposite side, and depositing them upon a screen, which being agitated by the motion, riddles out the dirt. It is a pretty thing to chronicle among the inventions of the age, and may ultimately come to something as an auxiliary to human industry.

There is a Root-washer, formed after this fashion. A large hollow cylinder is formed, with slats an inch, or such a matter, apart. This cylinder, with the roots in it, revolves in a cistern of water, by means of a crank, sunk to about one-third of its depth. At the back end of this cylinder there is a spiral formation which, as it turns, raises the roots out of the water, and carries them through a hole in the end, all cleansed, into a receptacle outside, without any handling. The dirt washed off, of course passes out of the cylinder through the slats, and sinks to the bottom of the cistern. This is a very simple machine, and must be highly useful where roots are fed.

In a former communication, I spoke of a Separator, from Elgin, Illinois, which, while it is a substitute for the common fanning mill, performs the much more comprehensive office of separating, not only grass and other foul seeds from wheat, but from each other, each being deposited separately. Instead of saying it was wholly by sieves, I should have said that it is done partly by sieves, and partly by the wind. The wind wheel is on a new principle, and being driven with great velocity, sends a current of air through a tube with great force, the wheat falling through it, while everything else is intercepted. There are five sieves (for different grains), their texture being fine where the grain first strikes them, to let through grass and other fine seeds, and coarse at the other end to let through the wheat. This cannot but be a highly useful implement to our farmers.

But I must pause for the present. I would say, however, to the readers of the *Farmer*, that they must not think I have lost my interest in the agriculture of Michigan, because I have not written them lately. It is because my other engagements have not permitted. I shall take great pleasure in communicating any little thing I may happen to

know, as often as my other engagements will allow. Meantime, it is the less necessary, since they are getting to be so well served by others.

Respectfully, WARREN ISHAM.

### Agricultural Education—College.

MR. EDITOR:—It is a very gratifying feature of these times, that the theme placed at the head of this article is attracting a large share of public attention. The time is passed for decrying "book farming" as scientific agriculture was called. Now almost all classes begin to feel the necessity of understanding the principles of science as applicable to this subject in its different departments. Why should not this be the most prominent subject at this time in this State? Have we not more interest in it than in any other? Does not the prosperity of the country depend more on the development of the resources and capabilities of the soil, than on any other cause? I mean pecuniary or commercial prosperity. The value and importance of agriculture to the prosperity of the country, will at once be conceded; but the question of educational training in relation to it, still remains open. Why should it be so?

If the development of the capabilities of the soil be important, will not that time and degree of education, which will most readily facilitate this end, be the most appropriate and important? What is the object of education—and the consequence of of literary institutions? In answering these questions two extremes have been adopted, to wit: On the one hand, that the sole design is to develop the intellectual faculties without any reference whatever to the use which can be made of that which is taught. I grant that when you can wake up *thought* in the mind, you have gained a very important point. But is this all you need to do? I think not. If the thought aroused is left without guide or direction, it is liable to falter and be blasted, so as to produce no ripe fruit, or to run into error—as liable to result in mischief as in good. The mind like the growing tree needs to be shaped, pruned, balanced and protected, so that it may yield an abundant harvest of good fruit. This simple development theory does not meet the whole case.

The other extreme is, that the design is to secure the greatest amount of pecuniary return. Every thing is to be discarded which does not promise a certain per cent on the amount expended. This last is founded on a very inadequate view of the relations of man to man—of man to time—to eternity—to the infinite. The object or design of living is not so much to accumulate money as to increase the sum of human bliss. I conceive that the correct theory is formed from a proper combination of the two, so far as they are capable of coalescing. Why may not thought be evoked as well by a problem,

theorem, hypothesis or a settled principle, which is capable of a practical, useful application, as by one which is not? I have been lead, from my observation on society, to think that the more distinctly the advantage to be derived is placed before the mind, the more readily and eagerly will it grasp, and then evolve the thought. I do not say that the advantage to be derived must necessarily be pecuniary. This it may not be. How often have we all, when certain lessons have been assigned, asked of what use will it be? When we were made to feel, we had some interest in it, it gave spring to thought and produced the desired result. The proper aim of education is so to develop the intellectual and moral powers as to fit us to fulfill the various relations of life to the best advantage. If this be correct, it should be so conducted as that the recipient, when sent out into the world may be ready to act, and not have everything yet to learn. These remarks will suffice for the general principle. The specific application is that the young man should, while he is acquiring the principles of science, both see and make their application to the development of the capabilities of the soil. The advantages of a thoroughly scientific agricultural education are many and great. The student sent out will begin where the experimenter of fifty or more years has to leave off; besides having learned better how to experiment. He is prepared to enter upon his occupation with pleasure and profit. Again, the resources of the soil being brought out, a much larger product can be obtained from the same amount of arable land, the result of which is to add so much, in fact, to the area of the State, besides the saving of much vexatious labor.

Another very important point gained, will be the elevation of the profession of agriculture to its proper rank among the learned professions. Indeed, I think, it ought to be placed at the very head of them, as it takes in its range a larger circle of the sciences than any of them. To obtain this educational training will require an institution—a college, in which this will occupy no subordinate place, but stand in the front rank. We ought not, we cannot, *we must not be satisfied* with a few third or fourth rate lectures on the science and art of agriculture in any institution.

In this connexion, a very important question arises; What shall we do? Where shall we look for an institution? I have already more than intimated and will now freely say, we should not be satisfied with anything less than the establishment of a *new college* in which this shall be made the prominent feature. Some, however, seem to be content with the project of attaching it to the State University at Ann Arbor. The principle reason for this is economy. We have there, say they, a college, professors, library, and apparatus, therefore all this



will be saved. To this project I have several objections. 1. I am opposed to the system of centralization, which makes the whole State tributary to one particular locality. 2. I think it bad economy—"a penny wise and pound foolish" plan. They have more now than they manage well. There is a college and a faculty it is true, but they have their work aside from this, and if the State becomes interested as they ought to be in this kind of education, there must be an increase, both of buildings and faculty, to supply the demand. So nothing is gained here. The library and apparatus would supply all only in part. But on the other hand you cannot blend instructions in this department with any other without suffering loss. Philosophy, astronomy, geology, and chemistry, will require to be studied with an application, and with experiments and observations, with a particular view, and in a mode peculiar to itself. Besides this you want your farm attached, so that much of the instruction may be given in the field—not exactly a *model farm*, but an experimental farm, where all sorts of slovenly as well as neat farming may be exhibited and the results demonstrated.

The creation of a new institution will require a little more outlay in the beginning, but will be good economy in the end. But I find I must close. If I should write you again, I will exhibit more fully the plan of the institution and the means for its establishment and support.

PHILO CULTUS.

### The State Fair Committees.

MESSENGERS. EDITORS:—Mr. "Fair Play," in the last number of your paper appears to think that there has been some partiality exhibited in selecting members of the viewing committees, by the executive committee of the Michigan State Agricultural Society, at their last meeting. I think if Mr. "Fair Play" had been present, he would have come to different conclusions. He himself must indeed have been well acquainted with the inhabitants of Michigan, and have been a perfect judge of their qualifications, if he could have selected the best judges on all the various committees, and to have them equally distributed throughout the State. Those counties from which the most of the committees are taken, happened to be more intimately connected with the State Society, than those counties of which he complains, unless it may be the county of Branch.

Our worthy friend F. V. Smith Esq., of that county, has been in the executive committee for several years, and knows the whole routine of business, and the difficulty of selecting judges, and no doubt he would give Mr. "Fair Play" any information on the subject he might desire; (supposing him to be a resident of that county;) but fearing that he would not take the trouble to ask it, and know-

ing that the principle upon which the State Fair is conducted, is equally interesting to others as well as Mr. Fair Play, I will state in as concise a manner as possible, the nature of the case.

At the close of the annual Fair in each year, an election for officers takes place. The President and Secretary are usually elected by ballot, the other officers are nominated by the crowd, and carried viva voce. That most certainly is as purely democratic as any other way, yet designing persons might intentionally nominate their peculiar friends. The nominees, however, are supposed to be both capable and honest, and they are elected by the people. At the first meeting of the executive committee, they try to get through, as soon as possible, with all the business of the society until the next Fair, except that which can be done by the Secretary and a business committee appointed from amongst the members of the executive committee for that purpose. The list of premiums is made out, and the appointment of the various viewing committees takes place; and how is it done? Why, some one will ask who will be a good judge of "short horns," for instance: a person is named, he may be well known to the person who proposed him, but a perfect stranger to all others or a majority of them, yet having confidence in the judgment and honesty of the member who nominated him, he is voted in and his name put down as one of the viewing committee; then another, and another is nominated, and so on until the business is gone through with. And it was particularly spoken of more than once, that they should be as equally distributed throughout the State, as well could be, according to the number of members of the State society. The books were often referred to for that purpose, i. e. to see who were members in certain districts, but no special record was kept by any one, to prove that they were equally distributed. Nor did we suppose that the task of being one of the viewing committee was so desirable that any one would complain if he did not happen to be placed upon it. It cannot be supposed that the executive committee can always make the best selection in judges for every peculiar article or kind of stock. We may be acquainted with the man, but not his qualification in that respect. That men have been put upon committees totally unqualified to judge of certain animals I have no doubt, but at the time they were selected, their judgment for what they were selected to decide upon was supposed to be good. I myself have had, in all probability, as much right to complain of the decisions of some of the viewing committees, as any other person, and submitted to it as cheerfully as any one could, but my charity, in most instances, led me to suppose that they were unacquainted with the peculiar character and propensities of the "Blood Horse." I knew full well, that my horse Bucephalus suffered nothing in the estimation of the community at large;

but so it is. I assisted in appointing those judges myself, and it was honestly done, consequently I do not complain, nor find fault with the Society. I know too, that there are but few men in the community that are good judges of blood horses, they have not had experience; but that does not argue that those same men are not good judges of draft horses or horses of all work.

I would repeat again that there was no intention on the part of any one of the executive committee to the best of my knowledge and belief, to select favorites, either in men or locations. We were obliged to select from those we knew, and those that we supposed were the best qualified to judge upon the various classes for which they were chosen. I don't suppose there ever has been, or ever will be, two hundred and forty-six committee men that will give entire satisfaction, either in their selections or decisions; but if our State Fairs are never more dishonestly managed than they have been the present year with the executive committee, the society will go on and prosper, and that such is the sincere desire of every well wisher to his country, I have no doubt.

A. Y. MOORE,

*One of the Executive Committee of the Mich. State Ag. Society.*  
SCHOOLCRAFT, JANUARY 10, '54.

### Rye Pasture and Rotation of Crops.

**Messrs. Editors:**—It appears by the last number of your paper, that a query has arisen in the minds of some of our agricultural friends at Commerce, how it is that I get seed rye, when I use the rye for pasture. I would simply reply that I buy the seed in preference to raising it. I also stated that I raised no oats, but I did not say that I used none. I hold that we farmers have a right, and ought to raise that which will produce the most nett profit per acre, all things considered, and some farms are much better adapted for oats and rye than mine—they may raise it and I will buy it, when wanted, which I prefer to do. The rye pasture is all that I need of the rye, and then if we plow it under deep, before the rye is ripe, we will not be troubled with any amongst our wheat. My rye will be so closely pastured that it will not come to a head. The only difficulty is that it is hardly sufficient for my stock, but it is the best substitute for pasture till the clover is large enough.

I am indeed glad to see a spirit of inquiry, and hope that my article on rotation of crops will be carefully scrutinized, and that some one would point out a better system, nor am I certain that it has not been done already. I notice S. M. Bartlett Esq., of Laselle, Monroe County, has published his system of a rotation of crops, which is simply corn, wheat and clover. He uses three crops of clover where I use a crop of rye and two crops of clover. He gets as many crops for once plowing as I get for two plowings, that, together with his system of planting his

corn in drills, eight feet apart, between the rows, and a stalk every four inches in the rows, and by that means, preparing the ground thoroughly for wheat, may be a better system than mine, at any rate, in theory it seems so, and I am inclined to try a piece in that way next summer. We should not be too tenacious of our own reasonings, but be ever ready for progress and improvement. My system as laid down I have never known strictly to have been practised upon, but have known the rye used for pasture, then turned under and succeeded with wheat. Our prairie soil is too rich for wheat if sown too soon after clover, but the opening lands of Michigan are not so generally, and wheat after clover or corn is a good rotation.

SCHOOLCRAFT, JANUARY 11,

A. Y. MOORE.

**MR. JOHNSTONE:**—*Dear Sir:*—In many of our communications to the *Michigan Farmer*, we find too many *abouts*, in the matter of reports. Why not give us the exact weight and measure without any *abouts* in the matter, and then we have no vague places to fill up the best we can, or, about that.

Now when any of our good friends make a deposit in the agricultural bank, we like to know the exact sum, and we will give him full credit therefor, and thank him in the bargain, being sensible of the exact amount of our indebtedness.

In the next place, Sir, will you please indulge me so long as to make a few remarks on milch Cows. But in the first place be it understood that I do not presume to instruct, but if I can succeed so far as to amuse, it will be as high as I dare to aspire, and by putting in a word now and then, (perhaps too often,) may call out something from our betters that will not only do me good, but perhaps many others also, for that is what we desire.

Now Sir, for the matter in hand. Spring before last, I lost a valuable Durham cow, out of three only, at the time, and being too much a Yankee not to make the best I could out of the remaining two, I concluded to give the two the feed of the three, and if possible get as much profit from the two as three, if they had all lived. How far I succeeded the result will show.

Our first cow (a common native) calved the last day of March, we gave the calf all the milk he would take until six weeks old, getting from one to four quarts per day more than the calf would take, and then killed the calf, the carcass weighing 91 lbs., sold for \$6.25.

Our other cow (half Devon) calved on the 20th April. We gave the calf same as the other, until eight weeks old, the cow giving from two to five quarts per day more than the calf would take. We then killed the calf. The carcass weighing 146 lbs., sold for \$10.31, the two calves \$16.56.

Oh, I am sorry to say that I have got to make use of the about in this recitation, but never once thinking of writing out the particulars, led us into this difficulty, for which I must beg pardon. But to continue, our family, hired help and all, would average six persons, beside considerable company; pork tub low, and lard tub less yet. Much butter and cream was necessary for cooking purposes, how much I am not able to say; but my wife, however, says more than we sold, which was, between the 15th June and the 5th October, 102 lbs. Now adding that used in the family, it will make 204 lbs. @ 1s 6d sold at the door, with the price of the calves, and I have \$36.06—to say nothing of the milk while the calves were fattening, or the hog feed that kept three hogs in fine condition all summer.

Thus you will see in three months and eighteen days, the net profit of these two cows would have bought two more cows in the above mentioned time, with but very little trouble or expense.

Well, by this time you wish to know the manner and mode of keeping, and treatment. All this you shall have in as few words as possible. In the first place the cows were kept in a good stable, with plenty of good water in the yard, fed on corn stalks cut up from one inch to three in length, saturated well with water, and then four quarts of shorts were mixed with them and after that one peck of turnips to each cow per day.

Cows will eat and eat clean three-fourths of a bushel so prepared twice a day; and in this way the butt of the stalk, be it ever so large, they eat entirely, so that nothing of the fodder is lost, nor any long stalks be contained in the manure.

Now Sir, the reason I brought my report down no farther, was on account of adding more cows on my return from the State Fair, and if I have trespassed too far on your good nature please pardon me, and I will do so no more; but the interest I feel in the *Michigan Farmer*, and the pleasure with which we hail every number, may probably account for such an error.

Yours Sir, most respectfully,

A. F. HAYDEN.

SAGINAW, Jan. 2d, '54.

[The communications of our friend Hayden are always welcome, because they are always the results of his own observation, put on paper in a way that every farmer understands. Besides he follows his own suggestions as to precision, and does not deal in amounts measured by "about so much." With him a bushel is four pecks neither more nor less. He has no occasion to be at all apologetical in offering us his "Yankee notions."—Ed.]

**THE CURTIS PLOW.**—A correspondent from Clinton county wishes to know where he can get Curtis' improved plow most conveniently, what is the price of it, and whether the further experience of disinterested persons confirms the favorable opinions already expressed in relation to it.

### Drills for Root Crops.

**MR. EDITOR:**—I have a few words to say on the subject of drilling in root crops. I borrowed a small drill to sow two acres of carrots. (I had very early plowed in a good coat of manure.) I plowed the land again very deep, the manure was well mixed with the soil, then I drilled in my carrots, but very few came up. On the third day of July my land was plowed again, and with the same drill I put in a crop of ruta-bagas, but still failed. I thought my seed was bad, but not so; the fault was in the drill—it drilled too deep. Before I got the drill I made two shallow trenches with the hoe and sowed some carrots; these did well for the season; and the ruta-bagas came up and did well on a small spot where I scraped some seed in with my foot. The drill I used had a square tunnel under the seed box; on the front, at the bottom of this tunnel was a cultivator tooth fixed to open the trench to receive the seed. By this process the seed was deposited as deep as the tooth went into the ground, which was much too deep. The tube or tunnel that conveyed the seed should have been placed farther off from the cultivator tooth, at a distance sufficient to have allowed the earth to fall in and partially fill up the trench made by the tooth. These small seeds do best when they are but lightly covered with earth. An inch auger-hole at the back part of the tunnel, half way down, with a tin slip under it to bring the seed out on the top of the furrow would be an improvement; then the small roller would press it in deep enough.

M. ATMORE.

[We have found that carrot seed vegetates more surely, and in a shorter time by steeping about 24 hours before being sowed, and then rolled in plaster till it becomes dry. Mr. Atmore is right about it getting too deep. It should be covered as lightly as possible, with the earth pressed on it with a light roller. Emery's Seed Sower, we have found a very excellent drill for sowing carrot seed.—Ed.]

### A Letter of Varieties.

**CANADA THISTLES.**—In the January number of the *Farmer*, N. gives an account of the Canada thistles he saw while listening to the black-birds along the canal from Utica to Mt. Clemens, and says he was informed by A. C. Smith, Esq., that they made their appearance wherever the original forest was removed and the earth for the first time disturbed. He then inquires from whence come the seeds of these thistles, mullens and blackberries that everywhere cover the country, or if their growth is spontaneous?

This question was introduced into the *Farmer* by "Plow Jogger," about the time Mr. Isham left it, and then underwent a very learned and interest-



ing discussion which concluded by an article from Plow Jogger himself proving that such products were spontaneous by that decree which said, "Because thou hast sinned, where thou dost remove the forest and break the soil, thorns and thistles shall it bring forth unto thee."

The mullen is an excellent remedy for sprained joints. Take the healthy growing leaves, wet them in warm vinegar and apply them to the sprain; they will remove the pain and swelling very soon.

As to blackberries, who does not know the value of a good dish of their delicious fruit, and how healthy they are? But the thistles, as we do not want them for present use, why we will just salt them down!

**BAKED INDIAN PUDDING.**—This cheap dish is one of the greatest luxuries. I found it on the table when on a visit to my sister, after having mourned its loss for twenty years. Scald the Indian meal and make it in a batter thick enough to pour; add suet cut in small pieces and that apples in pieces as large as walnuts. Sweeten with molasses and season with allspice. Bake it in dishes about one and a half or two inches deep; it should bake for a full hour and a quarter.

J. S. C.

CLINTON, Macomb Co., Jan. 1854.

#### Information wanted about Sheep.

**MESSRS. EDITORS:**—As we have in this State at the present time, a goodly number of men who are *posted up* in regard to sheep husbandry, it is desired that some of them, through the medium of the *Farmer*, would let us, who are still verdant in these matters, into the mysteries of sheep growing. To be more explicit, some prefer the Spanish Merinos, others the French, a very few still adhere to the Saxony, while others perhaps choose a cross of the Spanish and French Merinos. Now gentlemen, what we want is this: Give us the distinct physiological features between the Spanish and French Merino; "so that a wayfaring man," though a *farmer*, may not err therein—the amount of wool per head from sheep kept by the writer—whether washed or unwashed—what it brought per pound—the method of keeping the sheep, &c. Also the probable augmentation of the fleece by the application of *dope* or the *Cornwall finish*, whether it increases the amount of wool, as well as the weight—how it is prepared, &c., &c.

Gentlemen, give us the figures and facts. There is an important truth here, which should be brought to light. Present appearances indicate that Michigan is to be one of the great wool growing States of this Union. Besides this, there are great numbers of sheep brought in from other States every season, all claiming to be of the "blood royal," and sold at very high prices. Now if farmers are to pay such extravagant prices, they ought to under-

stand, not only the intrinsic, but the comparative value of these sheep also. It is of the utmost importance that farmers should start right in these matters.

Now gentlemen, you who have the knowledge, "let your light shine." Do not withhold the information in the hope of making a "big drive" out of us, in the shape of sales.

INQUIRER.

CLINTON, January 16th.

[We hope that some of our sheep breeding friends will deem the queries of "Inquirer," worth an answer. The question which seems to be much mooted among sheep breeders, is whether as many pounds of wool can be produced from an acre of land by stocking it with the large French or with the smaller Spanish merino, or whether the difference in the price of the wool is sufficient to pay the difference in the weight of the Saxon fleeces. The answer to the queries put by "Inquirer," to be serviceable, requires a statement of the trials made in Michigan, and the expense incurred in raising first rate flocks of either breed. Our friend Gillet of Sharon, can answer for the Saxons, and there are a number of successful breeders of the French and Spanish, and Silesian varieties of the Merino sheep, who can fully afford all the information required about them; and we hope they will not think it too much labor to put pen to paper on the subject.—ED.]

#### The Holland Colony in Michigan.

For the following interesting particulars relative to the Holland settlement in our State, we are indebted partly to a letter from the Rev. J. N. Shultz recently published in the *Western Chronicle*, and partly to notes of rambles sent us by our traveling correspondent.

The colony, which has been established some eight or nine years, is situated amidst the mighty forests that skirt Lake Michigan between the Kalamazoo and Grand Rivers. Black River runs thro' the settlement, which is divided into seven contiguous farming neighborhoods, each bearing the name of some favorite town in "Fatherland." The population numbers about five thousand, and they are spread over parts of the two counties of Allegan and Ottawa. The village of Holland is the centre of business for the whole community. It is said to be neatly built up, has a church edifice, school house, academy, stores, steam saw-mills, hotels, &c., but one obstacle prevents its more rapid growth and that is the sand-bar which obstructs the narrow outlet of Black Lake, an expansion of the river, of six or eight miles in width on which Holland is situated. Only small boats can pass the bar now, but a commencement has been made to remove the sand and build piers for preventing its future accumulation in the channel. When this is completed the calm deep waters of Black Lake will invite

vessels of all sizes to its safe harbor and prosperous city. Rev. A. C. Van Raalte, was the pioneer of the colony. Knowing the people for whom he was providing a home, he chose a location suitable to their wants. Forests of hemlock, oak, maple and whitewood supplied them with materials for their dwellings and boats, while shingles, staves, tanner's bark, &c., could be manufactured for exportation, and lumber from the pines just across Black Lake could be sawed and land soon cleared to raise their grain and vegetables. They now cultivate about four thousand acres of land and already produce a surplus of wheat. Mr. Van Raalte is pastor of the Holland church and his influence and assiduous care extend throughout the colony. He is a talented, indefatigable man of more than ordinary worth. English, Latin and Greek are taught in the academy, of which Mr. Taylor, of Geneva, New York, is the able and experienced preceptor. A paper is published at Holland in their own language. The Lutheran religion prevails and the people are strongly attached to the rituals of the church.

Among the practices of Fatherland to which they adhere very tenaciously, our correspondent mentions that of dividing their land into small farms, so that it is no uncommon thing to see an eighty acre lot divided into four or five farms. What they cultivate they do most thoroughly, and are an industrious, hard-working, exemplary people. They like to have their own way too, as well as other folks, and are not easily persuaded from it.

Their manner of felling trees is to chop *all* around the body and let it fall according to its own gravitation. An anecdote is related of a Yankee who happened to be passing where a Dutchman was chopping, and discovered that the tree would fall directly on his shanty. He told the man so, but the Hollander replied, "Me tink not; me tink not." But so convinced was the Yankee that the cabin would be destroyed and the family killed, that he went to it and tried to persuade them to leave the hut. His efforts to save them were not very well received, but their curiosity was excited to know what was going on, and this brought them to the door at the moment the tree commenced falling towards them. They ran, and had barely time to escape the crash which demolished the house and all its contents.

It seems to be one of their national characteristics to act in concert—what one does they all want to do.

The way they uphold the Maine Law in one of their towns is rather novel. The town board passed an ordinance authorizing an individual to sell a *half* gallon of liquor to each applicant every two weeks! It is thought that at these semi-monthly concerts there will be a general jollification as long as their rations last.

### Effect of Muck upon Grass Land.

MR. EDITOR:—As successful practice in anything useful is considered suitable for the pages of the *Farmer*, I will give a bit of my own in the culture of grass. I have a circular pond which is generally filled with water. During a drouth a year or two since it became dry, when I drew a large quantity of vegetable deposit from its bottom to an elevated spot of grass land. This muck shoveled as easily as sand. I placed it in piles where it remained during the winter. In the spring it was spread on the grass. In process of time I was astonished at the thriftiness of my grass where the muck was spread, while in spots which were not covered, the grass was but ordinary. The piece had been well manured for years, and I hesitated on that account to add to its richness. This muck evidently produced more grass than so much animal manure. Perhaps it protected it from drouth by lying on its surface, and still did not lose its enriching qualities by exposure to the atmosphere as barn-yard manure. How much wealth is dormant and hidden in our swamps and marshes, which labor and skill might convert into California gold.

EDWARD PARSONS.

GRAND BLANC, Genesee co., Mich., Jan. 20, 1854.

### Composition to prevent Potato Rot.

J. W. Webster, of Grand Rapids, applied the following composition to prevent the potato rot:— $\frac{1}{2}$  bushel of salt,  $\frac{1}{2}$  bushel of ashes, and  $\frac{1}{2}$  bushel of plaster. Of this mixture he put into each hill when planting, a tablespoon full, and at the time of hoeing, scattered broadcast over the tops the balance of his mixture. The whole applied was at the rate of about one and a half bushels to the acre. When he came to dig his potatoes he could not discover any sensible difference in the size of them in any of the rows, and he concluded his experiment fruitless. When he applied the composition, he left some rows without the application of the mixture. He kept the potatoes separate, and very soon those without the application began to rot, while the others remained quite sound and good.

### FOWL AND SWINE BUSINESS IN NEW ENGLAND.—

G. P. Burnham, a very extensive breeder of fancy fowls, pigs, rabbits, &c., near Boston, writes to the *Boston Morning Post*, that his sales of animals of different kinds have amounted to twenty-two thousand dollars for the past year. He says he has sent to the southern and western States alone, by Adams & Co.'s Express, rising \$17,000 worth of his Chinese fowls and fancy pigs; and to England and the Continent \$2,000 of his "Grey Shanghais." This is pretty well, and encouraging to our friends Pruden of Ann Arbor, and Freeman of Schoolcraft.

**F. V. Smith's Devon Stock.**

We present the portraits of two of Mr. F. Smith's Devon Stock, which took premiums at the State Fair, held in 1852. Mr. Smith appears to agree with opinions heretofore expressed in this journal that the Devon breed of cattle possess qualities which render them very valuable to the farmers of Michigan. The following communication addressed to the Secretary of the Michigan State Agricultural Society, is not without interest as showing where Mr. Smith obtained these fine animals.

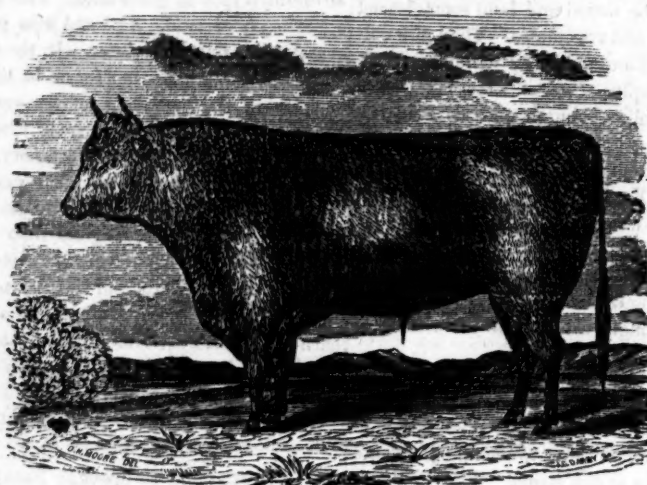


Fig. 7. DUKE OF DEVON. Owned by F. V. Smith, Coldwater, Branch co., Michigan.

DEAR SIR:—I herewith transmit to you a portrait of a Devon bull and heifer which were exhibited by me at the Fair of the State Agricultural Society last fall.

My bull, "Duke of Devon," is four years old this spring; was bred by M. Davy, North Moulton, Devonshire, England; was imported in October, 1851.

The heifer, "Duchess," is four years old this spring; bred by Mr. Davy, North Moulton, Devonshire, England; was imported in October, 1850. She was awarded the first premium by the New York State Society in the fall of 1851, as the best Devon cow. She was then two years old and had to compete with aged cows. She was awarded the first premium at the Fair of the Michigan State Agricultural Society, the same fall, as the best two year old Devon heifer.

F. V. SMITH.

COLDWATER, Branch Co., May 27, 1853.

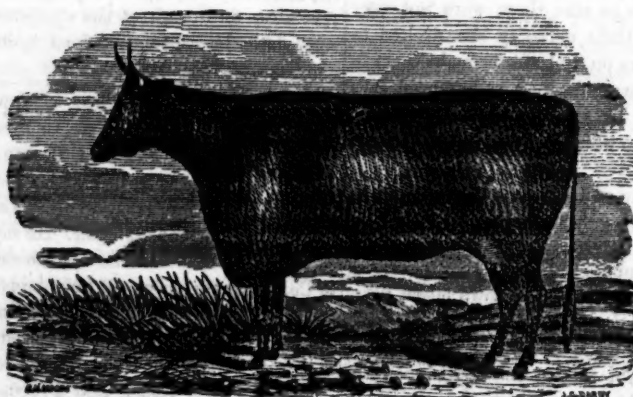


Fig. 8. DUCHESS. Owned by F. V. Smith, Coldwater, Branch co., Michigan.



## MICHIGAN FARMER.

ROBERT F. JOHNSTONE AND WARREN ISHAM, EDITORS.

DETROIT, FEBRUARY, 1854.

We are gratified to perceive that our friends have lost none of their kindly feelings towards the *Michigan Farmer*. Their communications to us, while transmitting their subscriptions to the new volume, have contained many words of warm encouragement, which we hope during another year still more fully to deserve. In the meanwhile we ask all of them not only to aid us on with the "material" which furnishes the "sinews" to keep the agricultural press in motion, but also to communicate with us from time to time, and give our ten thousand readers the benefit of their experience.

Some of our agents write to us to know if they can forward the names of subscribers at various times. To these we answer, yes, certainly. Every subscriber wants the first number just as soon after he gives in his name as possible, and we wish to know of it at the earliest moment.

THE RIGHT SORT OF SPIRIT.—A friend of agricultural pursuits writes to us, as he sends in a club: "I am not in the profession of farming, having left it when a young man, and taken to physicking the people instead of raising bread for them; but I still find time, in the intervals between dealing out powders and pills, to take much profitable exercise in my garden; and in sending you in this club, I believe I am doing as much good as any physician can do in the community by prescribing doses of the *Michigan Farmer* for my patients: they are cheaper and more beneficial than any patent medicine in the market; and if regularly taken, will promote the health of all who have the good sense to profit by them."

## Support your own Paper.

A very intelligent friend of the *Michigan Farmer*, who has interested himself for its support, for the past seven years, and has during that time also taken a number of eastern periodicals, writes to us from Grandville, in Kent county, in relation to what he calls the "suicidal policy" of sending money out of the State for eastern papers, to the exclusion of our own, as follows:

"In soliciting subscriptions for the *Farmer*, I am frequently met with the fact that some eastern agricultural papers can be obtained cheaper (?)

"Being somewhat of a 'Protectionist,' I inquire, 'Well, how much cheaper?' 'Why, I can get the ——— for fifty cents a year.' 'Well, you pay a trifle less for your paper, double the postage. have a journal adapted to the locality where published, with many good general hints, and the consolation that you have paid your money to help to

develop the resources of another State at the expense of your own; when, for a shilling or two more, you might have had an agricultural journal adapted particularly to the soil, climate, productions and wants of the farmers of Michigan.

"I am very cordially yours, "H. N. B."


COUNTY AGRICULTURAL SOCIETIES.—The secretary of the Kalamazoo county Agricultural Society has transmitted to us a condensed report of the proceedings of the meeting of that society for the purpose of taking action relative to their transactions for the year 1854. We publish them on another page. The example set by Mr. Allen should be followed by the secretaries of other county societies, which would thus have a condensed record of their proceedings to which almost each member could refer at any time. We will take pleasure in publishing these records, if the officers will only forward them to us in the right shape.

A FARM WANTED.—A friend writing from Saginaw wishes to know of a small farm for sale in the southern part of Michigan, along the line of the Southern or Central railroad. The farm should contain 40 or 80 acres, well timbered, not oak openings, with about 5 or 10 acres under cultivation, a house and stable, the land dry and title unencumbered. He would be willing to pay from \$250 to \$450. Payments would be cash. Any one having such a farm for sale may make a bargain by addressing us on the subject.

VARIEGATED WOOL.—Mr. C. C. Palmer, of Lima, sent us a letter containing among other inclosures a sample of very curiously colored wool, which he states is a fair sample of the whole fleece. The wool which he sent us is dark brown in color, but is barred with light streaks at intervals of every half inch, presenting an appearance strongly resembling the tail of a raccoon. The lamb from which it was taken was raised by J. M. Betts, and Mr. Palmer says he thinks it cannot be equalled, and we do not think it can either, unless we go back to the ring-streaked and speckled fleeces that the flocks of the patriarch Jacob grew after his agreement with his father-in-law Laban.

THE MAINE LAW AND THE FARMER.—A friend, writing from Kent county, says: "I have come to the conclusion to read your periodical the coming year, for the purpose of getting a stimulus. As we are now allowed none for the body, the best thing we farmers can do, is to use the spare change we were in the habit of spending for corporal stimulus, in getting some mental stimulus, that will make us all try to excel one another in having the best farms, the best crops, and the best stock. That is the stimulus that will give us all an abundance at home and a surplus for our neighbors." On this point we perfectly agree with our Kent county

friend, and believe with him in the propriety of giving a hearty and efficient support to the Maine Law, as it affords a better chance for mental stimulus, and to get a good education.

 We learn that a number of farmers of St. Clair county are preparing to organize an Agricultural Society.

**LARGE TOMATO.**—Rev. E. H. Pilcher, of Adrian, has a small garden, which he cultivates with his own hands very successfully, as his large vegetables fully show. He had one tomato the past season which weighed three pounds, and others very large.

**REMARKABLE PEAR TREE.**—The late A. J. Downing, in his work on fruits, page 318, describes a large tree growing in Illinois, about ten miles north of Vincennes. The tree is not thought to be over forty years old, having been planted by Mr. Ockle-tree. The girth of the trunk, one foot above the ground, is ten feet; at nine feet from the ground, six and a half feet. Its branches extend over an area of sixty-nine feet in diameter. In 1834 it yielded 184 bushels of pears, in 1840 it yielded 140 bushels. It is enormously productive, and the fruit pretty large. The above facts are given on the authority of Rev. H. W. Beecher, in Hovey's Magazine.

**BLIND STAGGERS.**—Mr. McCreary, of Schoolcraft, writes that he cured a young heifer of his own that was afflicted with the blind staggers, by the use of the following recipe. The symptoms of the disease are that the animal is almost deprived of sight; little or no expression can be perceived in the eyes; the animal is all the while in constant motion, turning round and round, with the head a good deal elevated—a sign that the disease is located in it. The remedy is: When the animal is discovered to be thus affected, immediately to make an incision on the top of the neck, about two inches long, just behind the skull bone (this incision should be only through the skin); then put in the gash two or three tablespoonfuls of spirits of turpentine, and as much ground black pepper as can be got to stick on the wound. After this is done, a few slices of fat raw meat, given each day for some days, will aid to restore the appetite.

**CIRCULAR OF U. S. AGRICULTURAL SOCIETY.**—The Second Annual Meeting of the United States Agricultural Society, will be held at Washington, D. C., on Wednesday, Feb. 22, 1854. Among the objects of the association are the following:—The acquisition and dissemination of the best experience in the science of agriculture; the union of the men who desire to advance to its legitimate rank, this most important of all human pursuits; and the increase and extension throughout our country of a

more cordial spirit of intercourse between the friends of agriculture, by whose countenance and co-operation this society shall be elevated to a position of honor and usefulness worthy of its national character.

Business of importance will come before the meeting. A new election of officers is to be made, in which every State and Territory is to be represented.

Applications will be laid before the society for the holding of National Exhibitions in different parts of the Union.

Delegations are respectfully solicited from all the Agricultural Societies in the country, and the attendance of all agriculturists, who may find it convenient to honor the occasion with their presence.

MARSHALL P. WILDER, Pres't.

WM. KING, Rec. Secretary.

### Kalamazoo Co. Agricultural Society.

At the annual meeting of the Kalamazoo county Agricultural Society, held at Judge Sleeper's office, in Kalamazoo, on Tuesday, Jan. 3, 1854, present—

JOHN MILHAM, President,

JOHN SLEEPER, Treasurer,

A. D. ALLEN, Recording Sec.

A. Y. MOORE,

JOHN F. GILKEY,

AARON EAMES,

ALFRED THOMAS,

F. W. CURTENIUS,

Executive Committee.

Premiums on field crops were awarded as follows, to wit:

Best 1 acre clover seed, A. P. Lille, quantity 2½ bushels. . . .	\$3.00
" " corn, Philip Goodrich, " 75 " . . . .	5.00
" " potatoes, Aaron Eames " 320 " . . . .	3.00

On motion,

*Resolved*, That the Ninth Annual Fair of the Kalamazoo County Agricultural Society, be held at Kalamazoo on Wednesday and Thursday, the 4th and 5th days of October next, and that all entries of live stock must be made before two o'clock P.M., the first day, and that the several committees commence their examinations at three o'clock P.M., the same day. And the entries of all other articles may be made on the first day of the fair.

*Resolved*, That A. Y. Moore, J. F. Gilkey, and the Recording Secretary, be appointed a committee to make out a list of premiums to be awarded at the annual fair, and that said committee report at the next meeting of the executive committee.

*Resolved*, That the sum of \$25 be allowed the Recording Secretary for his services for the present year.

*Resolved*, That Alfred Thomas and S. S. Cobb be appointed a committee to purchase lumber, posts and other materials to finish building the fence around the ground rented for holding the society's fairs.

*Resolved*, That a plowing match take place on Thursday, the 1st day of June next, and that John Milham be appointed to select suitable ground for the plowing match, and report at the next meeting of the executive committee.

F. W. Curteneus, Thomas Patten, Enos T. Lovell, T. Kirkland and Philo Vradenturg were appointed judges on plowing.

Adjourned, to meet again on Saturday the 6th day of May next, at 10 o'clock A.M. AMOS D. ALLEN, Sec.

## HORTICULTURAL DEPARTMENT.

S. B. NOBLE, EDITOR.

**Prolonging the bearing Season of the Strawberry.**

Geo. A. Peabody, Esq., of Russell county, Georgia, has originated a process by which he causes his strawberry plants to produce an abundance of fruit through the greater part of the year. His plan is simple and might undoubtedly be adopted with success by horticulturists in our more northern climate.

Hovey's Seedling is the variety cultivated by him. He sets the plants in rows two feet apart, with a row of impregnators every sixth row, and in the fall spreads a slight coat of woods' mold, and covers the ground completely with leaves, but never afterward digs up the surface or applies any other manure. Grass and weeds are cut up with a hoe, and runners which only occasionally appear are cut away, unless the old plant is failing, and then that is cut up and a new one started.

Every day during summer the vines are copiously watered by the assistance of a garden engine. This is the principal cause of success; of continued production and reproduction of fruit through such a long season.

By this system his plants during many months in succession are loaded with fruit in every stage of progression, from the blossom bud to the fully matured berry.

Spent tan-bark has been successfully used by some in place of forest leaves; it is said to increase the productiveness, the richness of flavor and the length of time of bearing. But an abundant supply of water is the main thing.

Experiments have been tried upon two beds only a few rods apart, one of which was well supplied with manure, the other with water; the former yielded a luxuriant growth of vines, but not a single berry, while the latter bore a fine supply of fruit. We commend the plan to a fair trial by amateur gardeners in our own State.

**Grapes.**

Mr. Atmore writes to us in reference to pruning grapes, that he thinks it injurious to cut them so early as February, because there is danger of the severe frosts killing the young wood that is left for the next summer's bearing. His time for pruning is in March after the severe frosts are past and before the sap rises. He says he has as healthy a vineyard, and raises as much fruit and of as good quality as any other man, and he challenges all doubters to pay him a visit at Battle Creek next summer and see for themselves.

He states also, that any one wishing to start a

vineyard or enlarge one can have some fine young plants, as soon as the frost is out of the ground. They are well rooted and his prices range from fifty cents to one dollar per plant.

**Ashes for the Curculio.**

MR. JOHNSTONE:—Being a subscriber to your valuable paper for the year past, and having noticed a number of communications in reference to the Curculio, and its ravages among plum trees, and not seeing any that treated them the way I did, I thought I would give you an account of my management of the *gentleman*. First I will say to you that I put out a small plum orchard, a few years ago, of some sixteen different varieties, and as the trees began to bear I noticed that there was an enemy at work among my plums, as they would drop off after growing from about one-half to two-thirds their size. I ascertained the cause of it to be the Curculio; and he in fact made such headway that in the year 1852 my whole crop of plums that hung on and ripened did not exceed four quarts, and many of these were affected. I learned that the "baste" lived in the ground, or at least lay dormant in the earth under the tree, during the winter months, and in the spring arose to the surface to commence the war anew. Now my idea was to head him; and to do this I waited until the buds of the plum trees had started nicely in the spring, then I took good strong ashes and sifted on the ground under the trees as far as the limbs reached. I covered the ground to the depth of nearly one-fourth of an inch in thickness. I did it just before a heavy rain shower that the ashes might leach and the lye descend into the earth, and the result was such a crop of plums as I never had before; nearly all of my trees I had to prop to keep them from breaking down with the weight of the fruit. This was only an experiment that I thought I would try; so one of my best trees I left unashed, and it blossomed very full, but by the middle of July there was not a plum left on the tree. All had been stung and dropped off. All the plums that were stung on the trees which I put the ashes under, I think would not make one quart. I intend to give my trees another ashing this spring, for I think the ashes a benefit to the growth of the tree, aside from checking the Curculio. Now if you consider this experiment of any benefit to my brother farmers, you are at liberty to do as you see fit with it.

Yours fraternally,

HARMON C. HAUSE.

BRIGHTON, Livingston Co., Mich., Jan. 10, '54.

[The experiment is a good one, but wants some further trials, to render it available as a certain specific for this pest. If some of the plum growers in other places will try Mr. Hause's remedy, during the next season, and will send us the result, we shall be glad to hear from them. A few years ago, fresh horse manure was found to have the effect of dri-



ving the Curculio from plum trees, and it was tried but without that general success which would make it a universal specific. Mr. Hause has taken care to give his experience in time to use next season, and has not waited for the enemy to be at work before publishing it, an example we hope others will follow.—Ed.]

### Great Yield of Onions.

Rev. Mr. Hammond, of Grand Rapids, raised, the last season, on one rod of ground, thirteen and a half bushels of onions. This is at the rate of 2,160 bushels per acre. This, we think, beats J. W. Sprague, of Keene, whose crop was a very large one.

### Bee Moths.

Mr. F. Smith of Canton, Wayne county, informed us that to prevent the bee moths from injuring his bees, he procured some large sticks of sweet elder, which after splitting and taking out the pith, he placed around the hives, putting several to each hive. The millers were attracted to these sticks, which were put the concave side down, crawled under them and deposited their eggs; he easily destroyed the eggs removing the sticks every few days for that purpose. Any other articles will answer as well as the elder. Such as canes and sun-flower stalks or large weeds which have a hollow sufficiently large to admit the miller. N.

### Seeding Bottom Lands with Wheat.

Judge Rolf, of Lyons, has made a good many experiments in raising wheat upon the bottom lands of the Grand River valley, and is of the opinion that two bushels of wheat to the acre should always be sown on rich land. When he has sown thick, he has always had better wheat and larger yield. The bottom lands are very rich and productive, and yield large crops. N.

### Large Flock of Sheep.

We visited Capt. John Lowry a few days since who is a large farmer on Lodi Plains. His farm consists of about four hundred and forty acres of very choice land, highly cultivated, his house, barns and sheds are large and commodious; he settled on this in 1835. For several years past he has been quite largely engaged in the sheep business, his flock now consists of about

#### SIX HUNDRED SHEEP.

One hundred and fifty are pure Spanish and the others variously mixed, some as high as nineteen twentieths. His clip of wool, was on the average five pounds per head for old and young. His sheep barn, sheds and yards are well calculated for the business; he has a yard and a portion of his sheds

for the bucks, another for the pure Spanish ewes, and a third for the grade ewes, a fourth for the grade weathers, a fifth for the lambs, and a sixth, which he calls the Hospital; to this are brought any which may by accident get lame or disabled, or sickly—he has now no sickly ones, his entire flock being remarkably healthy. His barn is so arranged that the sheep go under it to eat their hay, and may go in and out at pleasure; a free circulation of air is admitted to the fold. The sheep have free access to a stream of water at all times. Capt. Lowry thinks that the plan adopted by some of closely housing their sheep during the winter, is a bad practice. He has also quite a lot of swine of the Berkshire and Leicestershire mixed; they are certainly fine specimens of hogs, and he has no difficulty to make them weigh five hundred pounds when fattened and dressed for market. The Captain has also some good blood horses which he thinks quite superior.

Capt. Lowry, a few years ago, fitted up at very small expense, say twenty dollars a wind-mill for pumping water, to water his stock. This mill he informed us would raise water enough for five hundred head of cattle; the water was deposited in a large trough from which a spout conducted all the surplus water back into the well. Mr. Lowry is of opinion that a mill to be durable should be made, which would cost forty or fifty dollars; such a one he thinks would not be likely to get out of repair, and in the end the most economical. N.

### Rambles.—No. 6.

BY S. B. NORLE.

#### OUR VISIT TO GRAND RAPIDS.

The long contemplated and much dreaded ramble from our domicile to the city of the interior was commenced by taking the cars for the village of Kalamazoo, and from thence on a cold stormy morning in the last week of December, we took the stage upon the new plank road which is now nearly completed from Kalamazoo to the city, which shortens the distance to about forty-eight miles, that part of the road unfinished is nearly in the centre, not fully graded, and bad in the extreme. Passing over this portion we were very fortunate that we did not turn a somerset. We however had the misfortune to get off the track. Our engineer tried to press the locomotives through a straight place, in doing this we came in collision, not with a car, but a huge beech tree which had fallen across our track, and lodged at an angle of about forty-five degrees. By the assistance of the passengers the driver backed out, and got on the track without any further damage than demolishing a part of the top of the car directly over our heads. We congratulated ourselves upon escaping with so little damage, for we were told that the same team only

two or three days before had ran-away with a coach and six passengers over this bad road, breaking the coach without materially hurting a passenger.— After getting upon the track most of the passengers tried their own locomotive powers for some distance. While pursuing the *rough tenor* of our way on foot we met the stage from Grand Rapids, and like ourselves a part of the passengers were tramping, and what was rather ludicrous, some three or more of them walking behind the stage, had hold of a large rope attached to the boot to keep the stage from turning a somerseset. How they succeeded we do not know. As we parted we were assured by them that the best of the mud holes were ahead of us, which was anything but encouraging. Our coach was on runners and our drivers were very careful to take *all the time* necessary to accomplish a journey of forty-eight miles in *ten hours* which might have been done in eight—for the whole distance, about thirty-five miles, was a good plank road and good sleighing. On this route old time and distance are safe from annihilation. We congratulate our readers that an "Express Line" has just started running every other day, reducing the fare one third and occupying about two and a half hours less time, and hope it will be patronized just in proportion to its merits, for the public have submitted to exorbitant charges quite long enough.

Our route was through the towns of Cooper, Gun Plains, Martin, Wayland, Leighton, Gaines and Paris. The two former towns are very well settled on the line of the road, having many well cultivated farms. Where the road passes through the other towns a large portion of the country is a dense forest, having a great proportion of very superior beech and maple timber of luxuriant growth. As we approach within five to ten miles of Grand Rapids, very large and thrifty pine trees may be seen mingled with others rearing their lofty heads far above their neighbors, evidently claiming their superiority, and adding much to the beauty of the scenery.

In the forest by the side of the road we observed a large wild graper of Fox Grapes, planted and cultivated in nature's own way. Several of the vines are of monstrous growth. We estimated one to be sixteen inches in circumference and reaching to the tops of the highest trees. On the tops of the vines could be seen grapes, which had escaped the birds and had become dry. The timber along the road denotes a rich soil—that is well watered, and when brought to a good state of cultivation, will be a rich farming district. The plank used for making the road was sawed near where used by a portable steam mill, which was moved along as needed, many of the logs being cut on the track of the road.

After passing Plaster Creek about three miles

distant from our place of destination, we come to oak openings, and looking northward, in the distance we discover Grand Rapids City, located upon the Grand River, which at this place runs nearly south, and is about fifty rods wide; over it is erected a magnificent bridge, which for strength and durability is a superior piece of workmanship. This bridge has a good roof over it and sidewalks on either side, built by a company the stock of which is said to be above par. Above, beneath and below the bridge are the Rapids in the river extending about a mile, making a fall of thirteen feet. The dam at the head of the Rapids is built in the shape of a semi-circle, the better to withstand the pressure from above. The base of the dam is built of stone supporting a frame of wood filled in with stone; water pours over the dam in an unbroken sheet around the circle making nearly seventy rods. This dam raises the water so that the entire fall from the head of the canal cut to convey the water down is not much less than eighteen feet, affording an abundant supply of water which may be taken out of the canal for nearly a mile; the bed of the river in the rapids is a lime-stone rock from which during low water, quantities of stone are quarried for building purposes. Parallel with this canal for nearly a mile is laid out a wide street called Canal street, between which and the canal are erected all the mills (save one or two upon the west side) and machinery requiring power, of which there are many. In that part of the city lying upon the west side of the river are many large and handsome dwellings extending nearly a mile on the river a wide and beautiful street being laid out running parallel with the river. The west side is a very pleasant and delightful place for private dwellings and will eventually be occupied for that purpose. We were informed that it was contemplated to build a large canal from the dam to some point below the bridge in order to furnish an amount of water power inexhaustible in quantity. When this is completed the west side must increase rapidly in population and business. The land upon that side is quite level for some distance back. The city proper embraces an area of two miles square, a part upon each side of the river. On the east side is the business portion of the town; the streets are not at right angles but laid out to accommodate a curve in the river and bend around its banks. The population is about five thousand. There is as large a number of splendid dwellings adorned with as much good taste as is to be found in any city of Michigan west of Detroit.

The extreme northeastern portion of the city has quite an elevation; up along its side, to the summit are many very splendid mansions, overlooking the entire city, river and surrounding country for miles. Nearly upon the summit of this hill is the

Union School House which is an honor to the place, at which there now attend four hundred and fifty scholars; in all the schools ten hundred and fifty are taught by fourteen teachers. Within the city there are eight churches, three tanneries, six saw mills, three flouring mills, one veneering mill, three foundries, two machine shops, one wool-en factory, one pail factory, two sash and blind factories, one waggon-hub factory, one fanning mill factory, eight cooper shops, four meat markets, two bakeries, one confectioner, two brokers, three silver smiths, eight physicians, *twenty-one* lawyers, twenty-five carpenter shops, twelve boot and shoe shops, six milliners, two gunsmiths, fourteen dry goods stores, five clothing stores, four hardware stores, twenty-five grocery and provision shops, one bookstore, one crockery store, one book-bindery, one cradle factory, one rake factory, one planing machine, one axe factory, six waggon shops, eight paint shops, one marble factory, four druggists, one dentist, two Daguerreans, two livery stables, three harness shops, twelve blacksmiths, and eight public houses. They have also two printing offices from which issue large sheets, the Grand Rapids Enquirer and the Grand River Eagle, both edited with tact, and have a good advertising and circulating patronage which they well deserve to have increased.

We took lodgings at Rathbone's Hotel, a quiet and well kept house, where travelers can have all their wants ministered to by one who has catered for the public and knows how to do it just right.

At Grand Rapids the liquor law is well sustained; it is not known that any is sold, and all appear quiet.

The position, resources, activity of its citizens, with a rich farming district and commercial facilities, give to Grand Rapids all the advantages belonging to a large inland city, which are fast increasing. It has not any rival villages to contend with, and it must grow just in proportion to the growth of the country, and now does an immense business for a town of its size. From this place to the mouth of the river during the season of navigation, ply two daily lines of steamboats each way, of from eighty to one hundred and twenty tons burthen, carrying freight and passengers. From above the rapids also runs a daily line up the river to Lyons, a distance of forty miles.

THE OAKLAND AND OTTAWA RAIL ROAD will pass Grand Rapids City, and the citizens are already beginning to look up and forward to the time when they will hear the snort of the iron-horse nearing their city. Close by the city and river, but back a distance varying from one fourth of a mile to four miles, are the celebrated

#### PLASTER BEDS,

yielding an inexhaustable supply of first-rate plas-

ter. E. B. Morgan & Co., raised from their bed last year twenty-five hundred tons, and Mr. Butterworth, thirteen hundred tons, making in the aggregate, thirty-eight hundred tons; there are several other beds now opening, and next season, an increased quantity will be raised. This plaster sells at \$4 per ton, making twenty-seven thousand two hundred dollars from plaster alone. Within the city and adjacent to it have been found at different times at depths from two to eight feet imbedded in the sand and gravel, but never in the rock or plaster formation.

#### MASSES OF PURE COPPER,

one of which was shown us weighing twenty-two and three-fourth pounds, having the appearance as other pieces found do, of having been melted and brought there by some inundation or other commotion of the earth. We were shown a copper hatchet by D. Hatch which he informs us was found on or near his premises.

We visited the foundry and machine shops of Messrs. Ball & Babcock, an enterprising firm. They make about five hundred plows per annum; but their principal business is the manufacture of all kinds of mill-irons, machinery and steam engines of eighty horse-power for steamboats and mills, all turned off in superior style and workmanship. They use about one hundred and fifty tons of pig-iron yearly, and now use that from the furnace of Woodbury & Potter, of Kalamazoo, which they call a first-rate article.

We peeped into the Edge Tool Manufactory of Wm. S. Gunn, who has in connection with his establishment a trip-hammer, a large forge for burning Lehigh coal, and several smaller forges. He employs sixteen hands and turns out daily, eighty pieces of edge tools, a large portion of which are axes; all have the appearance of superior finish.

A little more than a mile above the dam on the west side of the river is the

#### CIRCULAR SAW MILL,

of Messrs. Ball & Powers; the saw is a few inches over four feet in diameter and cuts about fifteen thousand feet of lumber per day

The foundry of Stone, Chubb & Co., is now being extended to manufacturing all kinds of

#### AGRICULTURAL IMPLEMENTS

of the approved patterns, and include any new article that may be worthy of use. In connection they intend to keep constantly on hand a large assortment of field, garden and flower seeds. Their object is to make their establishment one of the largest in Western Michigan.

We rambled over the grounds of the Grand Rapids Nursery owned by Barker & Smith. This nursery includes ten acres of ground, one and a half miles east of the city. They have now about one hundred and ten thousand fruit trees in differ-



ent stages of growth of the various sorts; and trees of various sizes suitable for setting out may be obtained. They also have an extensive assortment of ornamental trees and shrubbery, vines and creepers. Their establishment is one deserving an extensive patronage which we hope they will receive. We were told there were one or two small nurseries in the vicinity, which we had not time to visit.

Of all the pleasant residences in the city we had only time to visit a few, and among the number is that of Damon Hatch, Esq., situated about a mile from the post-office. If you could see his garden you would not need to be told that he is an amateur cultivator of fruit, of which he has an assortment of the very best varieties of the different kinds. His dwelling and the ornamental grounds around it exhibit a taste and skill highly creditable to Mr. H.

The county of Kent is rich and productive, being brought to a high state of cultivation, and settled by an intelligent population. The farmers of this and adjoining counties carry the rich products of their farms to the city and receive in return cash or any supplies they need.

Our visit to the Rapids was pleasant and agreeable. We formed several new acquaintances, revived old ones, and received from all, kindness and attention.

#### Corn—Red Sorrel—the Drouth—Clover—how to Harrow Sod.

MR. EDITOR :—The last year I planted a field of twelve acres with corn, which is burr oak openings, been tilled twenty years, without clover, excepting one kind, namely, "red sorrel;" though there was not but one patch, that one covered the whole field. Last spring I plowed as deep as I could with two horses, harrowed one way, crossed out four feet each way. As soon as the corn was all up, went through once with a cultivator, then with the shovel plow four times; that sent the sorrel to China, or some other place. Just after harvest I went twice in a row with the plow, then once with the cultivator in the middle; then sowed clover and timothy seeds, half and half. It came up well, but the drouth sent it where the sorrel went to. The corn gave me fifty bushels to the acre. Another field of clayey soil was tilled in the same way and the clover done first rate. The last year was uncommonly dry, and the farmers in this section stewed and fretted terribly, because they were not going to have any corn; and what good did it do? They have more corn now than usual.

The right way to harrow sod, to prevent it turning back, is to commence in the middle furrow, and go the same way it was plowed, lap the drag one half and "haw" around the ends. I will stop. Success to our own *Michigan Farmer*.

Yours &c., CALVIN.

## LADIES' DEPARTMENT.

### Female Equestrianism.

EDITOR MICHIGAN FARMER :—*Sir*—I perceive by your January number, that the executive committee of the State Agricultural Society, have passed a resolution offering premiums for female horsemanship at the next annual Fair. Permit me to ask if the idea originated with them, was it suggested by their female friends, or is it merely in imitation of similar exhibitions in our sister States? If it is really the desire of those gentlemen to see their wives and daughters exhibiting their skill in feats of horsemanship to the curious gaze of assembled hundreds, they are certainly rare exceptions for the times, if we are to believe in the sincerity of all that is said by their sex now-a-days, against the propriety of such public displays for women. They appear so terrified at the idea that woman may "step out of her sphere," it seems almost beyond belief that they should place her on horseback and offer to reward her for riding out of it!

Not that there is anything unwomanly or unladylike in equestrian exercise, on the contrary, at proper times and places it is one of the most healthful, agreeable and graceful recreations we have; but I imagine that much as our husbands and brothers might admire the performance of a female circus rider, they would scarcely be willing to place their wives and sisters and sweethearts in the ring, even beneath the sheltering cover of the tent, much less, one would suppose, would they delight to parade them for public show among cattle and other live stock on the State Fair grounds. Neither do I think that such would be the wish of the ladies of Michigan who attend and give character to our Fairs. That there are many graceful equestrians among them I know, but I cannot call to mind one who would not shrink from such an exhibition.

There is a certain spirit of emulation very prevalent, which, however laudable it may be in a praiseworthy cause, often leads thoughtless imitators to do very strange, and sometimes silly things. Newspapers frequently furnish bright examples of this kind of ambition. For instance, there has been scarcely a paper from city or country for the last month that has not contained the following announcement:

"Mrs. Miller, the daughter of Gerrit Smith, of Kentucky, has been creating quite an excitement in Washington by appearing in full Bloomer costume."

"Well, what of it?" I have thought to myself as one after another I threw the papers aside with a feeling of impatience at the multiplied repetitions of the stale and senseless paragraph. What if she did? Are the editors all so delighted at it that they would like to have their wives and daughters put on the Bloomers and "create an excitement

too?" I do not think one of them would acknowledge this, or could give any better reason for publishing it than that somebody else had done so. The south-western presses harped upon it till they were weary; then staid New England caught it up and echoed it from city to city, and from hill to mountain, till every son and daughter of the pilgrims had it by heart. New York, listening at the door, overheard the "giving out" of the lesson, and straightway opening her hundred windows re-echoed it back with an emphasis and intonation worthy of the "school master" himself. The Western States, determined to be behind hand in nothing, stood up in a class and showed their smartness by reciting the precious bit of gossip in concert. At least one might judge so from the simultaneous reverberations.

You will think I have wandered far enough from female horsemanship, and so I have, but may it not be possible that the resolution referred to was prompted by a similar spirit of emulous imitation? a desire to prove that our State is not to be out done by others even in the matter of circus riding? Ohio, New York, and I believe one or two other States offered premiums for these displays, and a few ladies entered the lists, while a majority showed their good sense by preferring to choose a less public time and place for the enjoyment of this pleasant exercise.

If Amazons were in general favor now—if the chase and field sports of olden times were in vogue—or if ladies anticipated being drafted into a company of mounted rangers or cavalry, in case of war, this preparatory training would be most opportune. But as it is, woman is expected to *walk* in more private paths; why should she not *ride* there too?

I would suggest an amendment of the resolution by substituting the word *pen* for *horse*, and recommending that the same judges be retained and the same prizes be awarded for the best specimen of penmanship to be produced by ladies of our own State.

### "Uncle Stephen."

EDITOR OF THE FARMER:—As a letter which appeared in the December number of the *Farmer*, from "Uncle Stephen" to "Kate" afforded so much pleasure, I am tempted to send you an extract or two from a letter from the same good man to myself.

First let me tell you something about this dear uncle of mine. As you know from his letter that he is a dweller in Gotham—but the mortar and the bricks do not narrow down his noble heart to the common level of city people. His has one of the warmest hearts that ever beat in human bosom, and how we all love him. Ah, you would love him too if you could see him. There is a peculiar charm

about him that draws all hearts to him, and every body loves him. How many lovely and talented girls I know, who are perfectly delighted if allowed to call him by the pleasant soubriquet of *uncle*. Then see him surrounded by these fair beings, all eagerly listening to his amusing and instructive conversation, his mild grey eye sparkling with animation and intelligence—his whole countenance radiant with knowledge and benevolence, the soft locks falling so gracefully about his temples so beautifully tinged with the silvery marks of age—Oh! it is a scene for a painter. But you are wearied of my poor description of the man, while longing for an idea or two from his pen. I have not chosen these as remarkable for their beauty or merit, but because they are interesting to me. If they do not prove so to you excuse the partiality of a niece.

Speaking of a long summer jaunt of mine, he says: "You have 'been *roaming*' indeed, I hope however not again to 'Belle Isle,' and the mosquitoes. Swings and revelries are a poor equivalent for the perpetual serenades of those harpies—and I shall not soon forget the vengeance they wreaked upon us for invading their musical retreats. I shall certainly never repeat the offence so long as I retain my present modicum of brains. You ask how the world has treated me since my last pleasant visit in Michigan. Better I think than usual. My health has certainly improved, and I have enjoyed the lions, and the visits of my southern friends exceedingly. Of course the principal attraction of the city with these country damsels was the Crystal Palace, that "observed of all observers," and most richly did it repay them for the effort of a visit. I shall not pretend that shopping did not come in for its full share of attention, or that other lions of less pretension did not engage a portion of their time.

"I am rejoiced to see by your letter that you have so just an appreciation of the happiness of winter evenings spent at home. Your father will then be more at leisure to enjoy them with you, and I hope he will select some entertaining and instructive course of reading which you may enjoy together. It is the sweetest possible mode of blending intellectual culture with the endearments of family affection. And what can more surely and delightfully unite the sympathies, and views of the domestic circle, than enjoyment of thought, and feeling on the self-same object till the family head and heart think and feel in unison. Such is Heaven with the spirits of the just made perfect, and such sympathy will make a little Heaven of the well conducted family on earth. Such was the family discipline of the celebrated Jonathan Edwards, and the no less celebrated Sir Thomas More. I do not mean that reading should always occupy the evening hour. It should be alternated with other things, but hold itself a prominent and favorite

place, because it yields such valuable fruit. Music—plays that exercise the ingenuity and move the blood, should also occupy the evening hour, and by all these the body and the mind should be agreeably and pleasurably quickened into health, and all the household feel that they have one interest, and are growing up together in a sympathy that shall be eternal.

"Heaven is not a gloomy place—you know dear Hattie by a glorious anticipation—it is the home where every rapture of the heart—every energy of the mind will be redoubled by the perfect harmony that bathes like a sea of music all the blessed ones that meet there. God is Love—and his presence is an ocean of love to all the blessed ones that learn to share his spirit. If we forget the meanness of self-love in the interchange of that generous solicitude for the bliss of others, that is the secret principle of God's own blessedness, we shall find the law of our Creator full of rapture and ourselves infinitely elevated in judgment, as well as intelligence by every assimilation to its genial spirit. But I must not turn this letter into a homily. In love believe me your affectionate Uncle Stephen."

If this were not so lengthy an effusion, and I feared to weary your patience, I would give a short description of the holidays, but I forbear this time. If inclined I may at some future date use my pen in your behalf, till then farewell.

DETROIT, January, 1854.

HATTIE GREY.

### Judgment necessary in preparing palatable Food.

A person devoid of judgment and palatal taste cannot serve a savory meal, however abundant the material may be, or of whatever richness. A well prepared dish will recommend itself to fastidious appetites, though plain its ingredients, when one of luxury may be set aside from mismanagement in cooking. All the "cook books" ever written, of themselves never made a good cook; and these, joined with the requisite articles, in the hands of inexperience cannot produce a good dinner, the first, and most often overlooked requisite for which, is that the food be healthy. As a community we have a horror of consulting physiological demands in regard to what and when we shall eat; and the consequences are that health, sound, robust, vigorous health, is rarely to be met with. When grains, fruits, vegetables or meats are used, let them be of good quality, neatly prepared, and cooked the proper length of time; the intensity of heat being of great importance; and served when "just right;" on these points there will be little variation among good cooks however much they may differ in regard to seasoning. Many dishes are rendered indigestible and unpalatable by cooking too slowly, or by being overdone, or being kept warm when ready for

the table, in consequence of too early preparation. The importance of having each dish ready in season is known to all in the habit of serving good meals. Many things are equally palatable whether eaten warm or cold; in fact, this depends almost wholly on habit, whereas there are few articles but what are greatly injured in the fineness of their flavor by being "kept warm." I think were more food eaten cold, more brains at least, might have an occasional meal. A full view into the culinary arrangements of our homes would in a measure solve the problem of the apparent famishing condition of the female intellect. When the palate is the worshiped idol, the mind must bow subservient to it, and soon becomes a degraded, famished slave. Not only the female intellect suffers, man's does scarcely less; he must first labor uselessly hard to procure dainty articles, and he then overeats which produces mental stupefaction by the demand the stomach makes on the vitality to enable it to discharge its heavy burthen.

As a relish among farmers, where it is usually to be found, I know of nothing more pleasant than sweet cream; and in the vast array of dishes to which it is adapted I place it at the head. In use with sugar it forms a more dainty dressing for puddings, "short cakes," fruits of various descriptions and various forms of prepared farina, than any or all other combination of sauces, and as a seasoning for vegetables it is almost indispensable. In the preparation of fish it is equally good. It is far more healthy than butter into which it is rendered after much fatiguing labor, and therefore much cheaper. Remember I am writing for farmers, else I might feel guilty in holding a tempting bait to those who cannot reach it. For pies and cakes I would never use lard and seldom butter could cream be obtained not strong cream but fresh sweet cream—sweet sour cream when necessary.

FLORAL HILL,

Mrs. E. P. F. B.

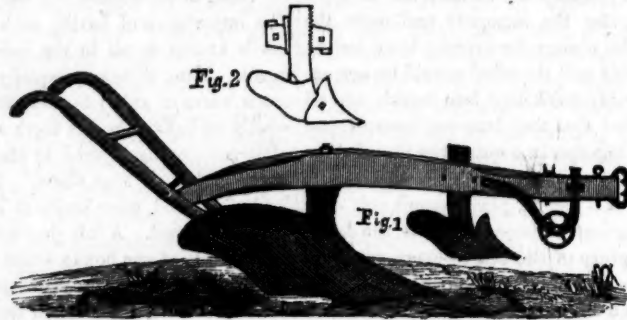
RECIPE FOR MAKING JOHNNYCAKE.—One egg, one teacup of sugar, half a teacup of sour cream, or five teacups of buttermilk, one teacup of flour, seven teacups of Indian meal, one teaspoonful of salt, one teaspoonful of allspice, and as much saleratus as the buttermilk requires.

### An Acrostic.

Life is allotted to the beasts that roam the wild,  
As well as to the human race, and tenants of the sky;  
Day is given to the man, the boy, the child,  
In which to make improvement ere they die.  
E'en all creation warns us with its train,  
Sun, moon and stars, and noon and eve and morn,  
Warn us that time once past is hard to regain.  
Resolve then that improvement shall thy ways adorn,  
Elate with this resolve let every moment be  
A monitor within thy breast to urge thee on.  
To find the road to happiness, and then to see  
How great the progress thou canst make from sun to sun.

M.





The Jointer Plow.

MR. JOHNSTONE:—Allow us through the *Farmer* to answer an enquiry made in the January number as to the superiority of the Jointer Plow over other plows now in use. In the first place we would say that the advantage of the Michigan Jointer Subsoil Plow (as we call it,) over others, is, that the Jointer or forward Plow cuts a small furrow from five to six inches wide and turns the slice over into the trench made by the previous round, in the form of a perfect roll, consequently placing all the clover and straw or stubble where it will be completely covered by the hinder plow, and there will be no grass or straw sticking up through the joint, or where the furrows lap.

Another advantage is that the edge of the slice being free from grass or sod, crumbles to pieces and fills the joint with loose earth, and by a peculiar construction of the wing of the hinder plow, it hoes as it were the furrow slice completely over on the side that it turns up and leaves the land in a better condition for a crop at one plowing than could be done by three times plowing in the old way. Furthermore, it preserves the strength of your land at least fifty per cent besides enabling you to raise one-sixth more grain to the acre.

You ask why? We will tell you. The reason is this. The clover, straw and manure being at the bottom of the furrow all the gasses evolved in their decomposition go to support vegetation instead of passing off in the air as they will when the manure is left exposed, or mixed with the earth at the surface.

Another advantage in this plow is that it will cut a furrow from six to fourteen inches deep and turn one the same width or wider or narrower as you may desire, which no other plow will do, and make good work. This plow will cut a furrow ten inches deep and six inches wide and do it well. In loose soil one team will plow ten inches deep and turn a furrow twelve inches wide with ease. In stiff clay soil it would require three good horses to do the same. The strength of team required will of course be in proportion to the width and depth of the furrows and the nature of the soil. The plow

works as well on the prairie as elsewhere. We would here state that we recommend the latest improvement as the best.

These plows, got up in the best style, made of the best material, polished and ready for use are always on hand for sale by us, the inventors and patentees. Our prices range from eleven to fourteen dollars according to size. Orders addressed to A. Smith & Son, Birmingham, Michigan, will receive prompt attention.

A. SMITH & SON.

#### Profits of Shanghais and Chittagongs.

EDITORS OF MICHIGAN FARMER:—Sir, I have been requested by many to make out an account of expenses, sales and profits on my stock of fowls for the last year. I do so and send you the result for publication if you think it worth while. Mine are mostly of the large breeds, Chittagongs and Shanghais, and sell at extra prices. No one will doubt that these are profitable when I inform you that I sell them at from \$2 to \$6 per pair; averaging \$3 and \$4. I also find that it pays well to raise fowls and eggs for home consumption at the ordinary market prices. My profits, as you will see below have been 65 per cent. I have raised one hundred and ninety chickens, nearly all of the large breeds, and one hundred and twenty-five dozen of eggs.

My stock on hand, January 1st, 1853, was ten full blood hens and three cocks, and thirteen half bloods for incubators, all valued at,	\$34 00
June 4th, purchased two cocks from Connecticut and New York,	11 00
Cost of corn and screenings for one year,	50 50
	<hr/> \$97 50

By 22 doz. eggs, sold at \$3 per doz...	\$66 00
By 1-2 and 3-4 blood eggs from 50 cts to \$1 50 per doz.....	13 00
By fowls sold from \$2 to \$6 per pair and a few 1-2 and 3-4 bloods from 75 cts to \$1 per pair.....	168 82
By 56 full bloods on hand at \$1 50 each.....	84 00
By 19 1-2 and 3-4 bloods on hand at 75 cts to \$1 each.....	7 20
	<hr/> \$339 02

Profit in one year.....	\$241 52
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The above is what I realized from my fowls and

eggs as I sold them, below I will give you an estimate of the profits at ordinary market prices:

One hundred and twenty-five dozen eggs at 15 cents per dozen, \$18 75  
 One hundred and ninety fowls at 25 cents each, 47 50

\$66 25  
 Corn and screenings for twenty-three hens, three cocks and one hundred and ninety chickens, cost, \$50 50

Profits for one year, \$15 75

I put my fowls at 25 cents each which is low, considering their size, and the eggs at 15 cents, as they are worth a quarter more than common ones. We have sold some as high as 25 cents, none below 12½ cents for eating. My fowls were raised on one city lot, four rods by eight. I had too many for so small space. My fence is only four feet high, and though only a common board one, my fowls never went out of the yard till I let them out the last of August.

N. A. PRUDDEN.

ANN ARBOR, January 17, 1854.

### "How Much Pork will a Bushel of Corn Make?"

Perhaps there is no class of people in the world, who work so much without system, and labor so much at random—none that know so little about their expenses and their incomes—none that make use of arithmetic so little, as those who till the soil for a subsistence. There is certainly a want of a due exercise of the organ of calculation among this class. The farmer plows, sows and cultivates his crops—harvests, threshes and makes sale of them, or feeds them to his stock,—but how rarely does he keep an accurate account of the entire cost of production, so as to know whether he gains or loses by the operation.

I have been led to make this communication from seeing the question asked, at the head of this article—"how much pork will a bushel of corn make"—in one instance the answer is 15 pounds. This result was obtained, as in some similar ones, from first weighing partly grown hogs, and then feeding for a time, and then again weighing: When the only true way to ascertain the actual cost of making a pound of pork, would be to take into account the entire amount of food consumed from the time the animal commences to eat, up to the time of slaughtering. I have not instituted any perfectly accurate experiments, but sufficient to induce me to believe that reckoning as above, an ordinary hog will consume on an average five pounds per day, or about thirty bushels in one year. Now it is an extra good hog that will weigh 365 pounds at that age; but this estimate gives only about eleven pounds of pork, to the bushel of corn consumed. The average price of corn for this State, may be estimated at 50 cents per bushel, which makes the cost of production \$4.11 per hundred.

But the actual average of hogs at one year old does not exceed 250 pounds per head, or less than eight pounds to the bushel of corn; or at an actual cost of six dollars per hundred to the producer, when fed wholly on corn.

Now it will be seen that if the above estimate is anything like an approximation to the truth, pork cannot be profitably raised in Michigan from corn alone. And I have no doubt that if this question were put to every farmer in the State, it would be answered by nine tenths of them in the negative. Yet the most of our pork is made almost wholly from corn. Why is it persevered in from year to year? Will not the answer be found in the first paragraph of this communication.

I do not mean to say that pork cannot be profitably grown at all. No doubt with the right kind of food and management, it may be made at a cost of three or four dollars per hundred. Boiled potatoes and pumpkins, mixed with a portion of corn meal, will make hogs thrive faster than corn alone—changing the kind of food often is advantageous. Hogs will do well in summer in good clover pasture, with little else. Try it, you who are in the habit of keeping your hogs in the highway. Apples are good, and so are peaches. Having many peaches last year, that were not marketable nor profitable for drying, (being of diminutive size, on account of the trees being overloaded,) I concluded to turn my hogs into my orchard, and let them help themselves, although some of my neighbors said it would spoil their teeth for eating corn. They had all the peaches they could eat for more than a month, and I never had hogs gain faster on any food—they would hardly touch an apple while the peaches lasted; and they received no injury to their teeth whatever. And now in conclusion I will say farmers, if you have nothing but corn and the highway, to make pork of, take your corn on the highway to market, and sell it, and buy your pork.

B. J. HARVEY.

ADRIAN, Lanawee county, January 23, 1854.

[Mr. Harvey answers his own question in a manner, and with a sound earnest truth that ought to make farmers reflect on the subject of which he treats. We shall be glad to hear from him again. Such practical remarks are worth whole volumes of scientific analysis to the real working farmer.—ED.]

### Cobble-Stone Houses for Farmers.

The advantages and desirableness of cobble-stone houses for farmers, have been heretofore spoken of in the *Farmer*, and some instances among us cited in illustration. I have recently seen one which has lately been erected by L. Emery Esq., upon his farm, a mile or two north of Hillsdale. It differs from any I had heretofore seen in this, that the stones are cleft asunder, and the face laid outwards; and

as they are of different hues, the effect is rather pleasing than otherwise.

Mr. E.'s house is 28 feet by 40, with an ell or linter 16 feet by 32. The walls being 18 inches thick. There is a cellar under the whole house with a wall 2 feet thick and 7½ feet high, making the entire height of the wall, from the bottom of the cellar 23½ feet, including the plates. Oak strips were laid in the wall inside, to nail the lath to. The water table, window, door caps and sills, are of the best swamp oak. The part being exposed to the weather is dressed and thoroughly painted and sanded. It is a story and a half high, and is ornamented with frieze and cast iron guards to the windows in the half story. The chimneys are built in the wall at each end with brick upon the inside. Appended to the house is a cistern holding seventy-five barrels, to which the water is conducted in eave troughs of tin, and a well fifteen feet deep.

The entire cost was twelve hundred dollars. The hauling of the stone is not included in this estimate, as their removal from the land was necessary to successful culture.

I am glad to be able to record this evidence of the substantial prosperity of Mr. E. His success in renovating a worn out farm, has heretofore been chronicled in the *Farmer*. By deep plowing and thorough culture, he has doubled his crop in a very short time. And yet he is not a farmer by profession. As a clothier and miller, he is equally successful.

I.

### The Markets.

Since our last issue the advance in the prices of breadstuffs in New York has been such that wheat has reached the highest price ever known to have been given for it. The extraordinary prices of \$2.75 per bushel having been paid for White Genesee wheat, and \$2.50 to 2.60 for White Michigan. Of the latter there is but little on hand in any of the eastern cities. These prices are purely speculative, for they are in advance of the rates paid in Liverpool, London, or Havre, and are predicated upon the future wants not only of the foreign market but of our own. It being well known that it will be difficult with the present demand for shipping to obtain full supplies for the home market before the opening of canal navigation. Just previous to our going to press we have advices by telegraph of the arrival of the Atlantic. She reports Western Canal flour as selling at 43s. to 44s. sterling per barrel. This reduced to our currency is equal to \$10.32 to \$10.56 per barrel. Wheat is quoted in Liverpool as worth 12s. to 13s. per bushel of 70 lbs.; or at the rate of \$2.67 per bushel of 60 lbs. It will be seen therefore that New York prices are speculative, and a telegraph despatch to us dated January 30, says that the private letters

per steamers do not warrant the extreme rates offered and paid in New York within the last week.

Corn is also doing better, \$1.10 being paid in New York. The Liverpool price for it has advanced to 52s. per quarter of 480 pounds, or \$1.56 per bushel of 60 lbs. Corn now sells in this market at 60 cents, and some cargos have been sold at 70 cents to be delivered free at Buffalo on the opening of navigation.

The Pork market has also sustained an advance. During the past week good carcasses such as sold for \$4.50 previously are now sold for \$5.00 and \$5.25 per 100 lbs., and we perceive that mess pork is now worth \$15.50 in the New York market.

Taken altogether the prospects of the farmers are good till the next crops come in, when prices, of course, depend a good deal on how the harvest turns out then.

### Cheese-Making.

During a conversation with a gentleman from Herkimer county, N. Y., who is engaged in the dairy business, we gathered the following particulars about cheese-making, which he thinks will be an average for that county. That for each cow it requires two acres of pasture and one and a half for hay, for a year; that eight cows are as many as one man can milk with profit; one man can make and attend to the cheese from twenty cows; each cow will produce milk for five hundred pounds of cheese yearly; in the spring, before all the cows give milk, butter is made, and the same in the fall; the butter more than pays for milking. Cheese this last fall was 10 cents per pound, making the product of each cow \$50; from this must be deducted the cost of making, which he could not give definitely. In dry seasons, when the grass falls short, he feeds corn-stalk fodder. He plants corn for that purpose, and when not wanted for soiling he cuts and cures it for winter food, which the cows are very fond of. His method of planting the corn is, after having prepared the land, he furrows it with a plow two and a half feet distant; in the rows he drops from thirty to forty kernels of corn per foot in the furrows, and covers with the harrow. He then goes through the rows with a cultivator. He cuts the corn before frost with a sickle, ties it up into rather small-sized bundles, and puts it into shocks, when it is left to cure. One acre planted in this way yields fifteen tons of fodder. He dislikes the mode of sowing corn broadcast; he says in that case the sickle cannot be used, and when mowed it is quite difficult to cure it good, and sometimes a total loss ensues; but when cut with a sickle it is easily bound, and he never lost a crop. His corn sometimes grows five and six feet high; and he lets it remain till the corn, which is always small, is suitable for boiling, and the family can



always have a supply of green corn in May. His pasture land he seeds down with white clover, red-top and timothy, always encouraging a thick growth of grass, which is consequently finer, and cows like such pasture best. He knows some pasture managed in this way which has produced good feed for nearly twenty years; but to do this the more effectually he sometimes uses plaster.

The gentleman allows that some cows will produce milk for seven hundred pounds of cheese, but he is of opinion that the majority make less than five hundred; and, allowing for dry seasons, he is pretty certain that five hundred is as much as ought to be allowed to found anything like a correct estimate upon the profits of the dairy business.

N.

**ORIGIN OF NAMES.**—A gentleman on the cars gave us, a few days since, a very graphic description of the origin of a few names that are applied to the inhabitants of several of the States, the significance of which may not be very generally known. The citizens of Ohio are called "Buck-eyes" from the resemblance of the fruit of the horse chestnut to the eye of a buck. The horse chestnut is a native of Ohio. The inhabitants of Michigan are called "Wolverines" from the numerous prairie wolves that infested the State at an early day. These wolves are small and usually timid and harmless, and entirely different from the large grey wolf. The people of Indiana are called "Hoosiers" from the fact that the first settler who crossed the Alleghanies westward, after he reached the valley, took off his hat and swung it, hallooing loudly "I am a Hoosier," meaning that by great exertion he had succeeded in his efforts to scale the mountain, and reached the plain. Those of Illinois are called "Suckers," because the early settlers of the country were in the practice of going up the rivers westward to the lead mines in the spring, at the same season that the fish called suckers went up to spawn. They worked the mines in summer, and returned again about the same time the suckers did. The citizens of Wisconsin are called "Badgers," because the State, at an early day, contained large quantities of such animals. We did not learn why the Missourians are called "Pukes," but suppose the name to be equally significant. We have heard of a different reason why the name "Hoosier" is applied to the people of Indiana, but are not prepared to say which is most correct.

N.

**HOVEY'S MAGAZINE OF HORTICULTURE.**—We call attention to the advertisement of Hovey's Magazine of Horticulture, which we publish in this number. This Magazine has reached its twentieth volume, and with age, its reputation as a standard work on the science and practice of cultivation in Pomology, in Horticulture, Landscape gardening and all mat-

ters and sciences connected with the garden and the orchard continues steadfastly increasing with each new volume.

**THE PENINSULAR JOURNAL OF MEDICINE, and the Collateral Sciences.**—We have received a copy of a neatly printed pamphlet bearing the above title. It is published monthly under the editorial charge of E. ANDREWS, A. M., M. D. Professor of Anatomy in the Michigan University at Ann Arbor. From a hasty examination we should judge it to be a work of merit and one which will tend to elicit much useful information for those engaged in the profession of medicine. A good share of the present number is devoted to original communications and the remainder to selections from able writers in other medical journals. Terms, \$2 per annum.

### Play Time at a Country School.

BY L.

The lessons are said, the tasks are o'er,  
The children are out by the school-house door;  
Like a troop of prisoners just set free,  
They are laughing and shouting, wild with glee.  
Some go frolicking over the green,  
Some by the walnut tree are seen,  
And they gather - desert rich and rare  
From the ripe brown nuts that have fallen there!

Some are away where the trickling rill  
Comes creeping out from the rocky hill,  
Still singing the same low song it sung  
When their grey haired sires like them were young.  
They are dipping the crystal water up,  
And pressing their lips to the battered cup;  
How pure the draught! may they never know  
A sadder cup in this world of woe!

Young children, now is your hour of play,  
Be cheerful and happy while yet you may,  
One hour, and then in the quiet school  
Where order and silence should ever rule,  
Again ye'll gather with studious looks,  
To learn the task from your well-worn books.  
At learning's fount ye must bend and drink,  
And learn to be happy by learning to think.

**FARM HORSES.**—Since in the blood horse is found the peculiar attribute of the horse, in its highest perfection, too much can hardly be said of the importance of a liberal dash of all blood in all grades of horses. On the road it is necessary, and at the plow or the truck it will tell wonderfully. The farmer, with half or three quarter bloods, can plow his half acre a day more than with common farm horses. He can safely reckon that his blood will haul his load some miles farther in a day than a common team. This is so. Theory points to it, and experience has proved it; and if the farmer can actually increase the value and efficiency of his motive power, without increasing the number of animals or expense in rearing and keeping, is it not as much a matter of good policy and good husbandry so to do, as to improve his land, and raise larger crops by extra manure and extra tillage? Certainly it is; and while it is expensive at the outset to improve land, it costs no more to raise a good horse than a poor one.—*N. Y. State Ag. Society's Transactions, 1851.*

**BLACKWOOD'S MAGAZINE.**—Blackwood for January is as usual filled with papers of interest; among which we notice the second part of the story of the Quiet Heart, by the author of Katie Stewart. A review of the last published work of Walter Savage Landor, entitled, *The Last Fruit off an Old Tree*, *The English at Home*, *A Painter in Persia*, *Dives*, *The Beverages we Infuse*, and *The Aberdeen Cabinet*, an ably written editorial, condemning in no gentle terms the course pursued by his Lordship the Premier, in reference to the eastern question of war with Russia.

We refer our readers to Scott's advertisement of the American reprints of British Magazines on our cover.

We learn from the Secretary of the Michigan State Agricultural Society, that the Hon. Thos. H. Benton, of Missouri, has declined the invitation to deliver the address at the next Fair. Marshall P. Wilder, Esq., of Boston, who had also been invited, has likewise declined.

### The Markets.

**BEEF**—Good first rate carcasses of beef are worth \$6.50 to \$7.50; but they must be first rate. Common beef brings \$5 to \$6 per hundred.

**SHEEP**—Fine fat sheep, extra, would bring \$4. Other kinds sell from \$2.25 to \$3.50.

**PORK**—Good heavy carcasses sell at \$5.25 to \$5.37½. Light ones from \$5.00 to \$5.25.

**HIDES**—Bring 5 cts. per pound.

**TALLOW**—Rough tallow is worth 8 cts.

**FLOUR**—Flour now sells at \$7.25 per lots; the mills retail their extra family at \$8.

**WHEAT**—The receipts of wheat are light. In New York Michigan white sells at \$2.50 to \$2.60. Here it is only worth 1.56@1.60.

**BUCKWHEAT**—Scarce and sells at \$2.50 per 100 lbs.

**CORN**—The price of Corn advances. It retails here at 60 cts. Cob Corn sells for 56 cts. per 70 lbs.

**OATS**—Sell at 40 cts. per bushel.

**BARLEY**—Is worth at the Breweries 62½ cts. per bushel.

**SEEDS**—Good Timothy seed is worth \$3.00 to 3.50 per bushel. Ordinary may be had at \$2.50 to 2.75. Clover sells at \$7.00 to 7.50.

**Fowl**—Moulting grass sells at \$1.00 per bushel. Orchard grass seed at \$3.00. Kentucky blue grass seed at \$3.00. Red Top at \$2.00.

**POULTRY**—Turkeys are worth 12 cents per lb. Chickens are worth 10 cts. per pound or 2s 6d per pair. Geese 3s each.

**GAME**—Venison is worth 6 cts. per pound. Prairie Chickens 4s per pair. Quails 4s@5s per dozen.

**WHITE BEANS**—Are \$1.00 to 1.25 per bushel.

**DRUM APPLES**—Are worth 12s per bushel. Good green apples bring 10s per bushel.

**FEED**—Midlings retail at 9s@10s per 100 pounds; Bran is worth 90 cents; and ship stuff \$1.00.

**FISH**—White Fish are worth 7.50 per bbl. and hick bbls. 4.00. Trout are selling at 7.00. Cod fish 4.25 to 5.00. Mackerel, No. 1 is 14.00, No. 2, 11.50, and No. 3, 9.00.

**SALT**—Fine Salt is 2.25 per bbl., and coarser is 3.00.

**PLASTER**—The mills retail plaster at 7.00 per ton.

**LIME**—Sells at 6s per bbl. and at 25 cts. per bushel. Water Lime is worth 12s per bbl.

### Receipts.

Cash received for *Michigan Farmer*, from Dec. 30, 1853, to Jan. 27, 1854:

D Mills \$5, R Fulkerson \$1, H W Donally \$2, W W Whedon \$6.25, J M Stiles \$1.50, A F Hayden \$6, J D Van Horn \$2, B D Worthington \$9, Mary E Garvin \$11, M E Palmer \$10.35, E H Johnson \$10, J N Cathren \$3, A Arnold \$7, D N Willard \$3, D S Hicks \$2, C Ousterhout \$5 cts, M Kern \$1, L Blackmar Jr \$1, D Williams \$1.75, J M Lay \$3, C Cameron \$6.50, E Madison \$1, J Durkee 75 cts, H Johnson Jr \$4, Charles Bower \$1, Geo Sherwood \$5.25, J S Ketchum 75 cts, C W Calkins \$10, G W Armstrong \$23, C R Gardner \$1, J B Wheelen \$2, William Nes \$1, A Alexander \$1, Jesse Cram \$7, G W Kennedy \$5.25, J A Dyer \$2.75, A C Waterman \$5, S B Noble (General Agent) \$25, H C Campbell \$11.34, Mrs R B Hampton \$4, A McDougall \$10, W Byington \$1, J M Holden \$6, R Hewett \$1, John Richard \$3, E Carrier \$5.25, J C Blake \$3, William Mercer 25 cts, Isaac Schrom \$1, W W Cole 75 cts, S R Beals \$3, N Briggs \$4, J H Parkels \$1, C S Coffinbury 50 cts, Moses Hall Esq \$1, L Treadwell \$1.50, G T Clark \$1, B M Newkirk \$7, S O Knapp \$2, H B Muscott \$2, James Lee \$1, J J Robinson \$9, J Stevenson \$3.25, D D Sloan \$1, Hon T Dort \$1, F Marlat \$1.00, J O Ferris \$4, F Brownell \$15, F Marlat 75 cts, H S Tyler \$1, Levi Loomis \$13, L Sprague 75 cts,

A P Copley \$5.25, R Pallister \$1, Mary E Garvin \$3.25, W Clark \$1, F G Lee \$2, W Gates \$1, J W Hrd \$1, Richard Jones \$1, G W Armstrong \$7.50, D B Burnham \$1, G McCamley \$1, A Smith & Son \$3, A Eastman \$1, L Coburn \$6, A Low 75 cts, H Coburn \$1, B Chilson 75 cts, D Mills \$10, A J Crosby \$2.25, L Coburn by H Post \$2.25, C P Dibble \$7.50, E B Bassett \$2, J M Creamy \$6, N Tenney \$1, D Hatch \$10, J O Pelton \$6, S D Hall \$3, J Richard \$4.50, O H Atchison \$1, D Keyes \$4, L O Hammond \$6, L Mott \$1, W Sanders \$9, M A Taylor \$6.25, R W Whipple \$2.25, E Egbert \$1, N Power \$1, A B Nicholson \$1, A Pachen \$1, E Warner \$1, A Merrill \$1, A P Hughton \$5.75, Jesse Sutton \$10, S Anderson 75 cts, J Franklin \$1, C C Palmer \$12.25, P Grandy \$3.37, D A Wright \$1, E O Briggs \$2.50, R M Geer \$1, W A Whitfield \$1, B M Adams \$1, J Ten Eyck \$3, Justus Sage \$3, H A Willover \$6.50, D Keyes \$12, F M Drake \$1, J Cranson \$1.50, C Vankuren \$1, T J Congdon \$1, W W Whedon \$2.50, H Munger 75 cts, J Bigelow \$1, D S Crossman \$3.25, Myron Rider \$5, L G Hoag \$3, E N Faxon \$2.25, Harlan Mead \$7.50, Seba Murphy \$1, Ashbel Beach \$3, E B Chandler \$1.75, H Johnson \$3.27, J Ten Eyck \$2, G W Redfield \$1, J D Skinner \$1, A McDougall \$1, H C Campbell \$1.89, D T Hazen 75 cts, Joel S Pratt \$1, J C Donaldson 75 cts, C P Benton \$13.75, J O Pelton \$8, J Lowrie \$1, A G Eastman \$27, R M Wheaton \$6, M G Cobb \$12, C Twitcheil \$3.27, G W McAllister \$7, Thos Love \$1, W H Powell \$5.25, T Blackett \$1, D Smart \$2, John Milham \$12, J Boynton \$4, H W Donnelly \$2.51, H Gray \$1, E N Mallett \$5, M Harris \$4, D O Woodruff \$12.15, G W Hughes \$1, J W Ames \$1, A Starkey \$1, C Ellis \$1, D Vanness \$4, J McClintock \$1, T Lyon \$1, R N Low \$2, Isaac Adams \$1, L C Crittenden \$5.25, M Topping \$1.50, E H Johnson \$17.50, A Curtis \$1, G H Sherman \$1, M J Titus \$2.40, J T Wilson \$1, Oell Train \$1, E Parsons \$1, J B White \$4.50, T R Sherwood \$5, D Bates \$4.50, E G Cole \$4, S M Grimes \$7.50, E B Bassett \$1.25, Mrs R B Hampton \$5, Horace Dean \$2, E Twitcheil \$2, A P Andrew \$1.50, M S Hadley \$1.50, D M Fox \$9, J Bryan \$1.

ENGLAND, AS SEEN WITH AMERICAN EYES.

D. Appleton & Co.,

HAVE JUST PUBLISHED

### THE MUD CABIN;

OR,

*The Character and Tendency of British Institutions,*

BY WARREN ISHAM.

1 vol. 12mo. Cloth, \$1.

*More Criticisms of the Press.*

"This book deserves a better title, for it is really one of the most faithful and true pictures of common life in England that ever came from the hand of an American. Mr. Isham travelled through England with clear eyes and open understanding. Appreciating what travellers too often forget, that the real character of a nation is to be judged by the condition of its masses, he made the common people the object of his special study. He mingled freely with laborers of all kinds, visited their homes, heard their complaints, saw their mode of living. But he does not content himself with presenting facts. He traces evils to their causes, shows the practical operation of laws and institutions, and reasons soberly and clearly. The book is not one of that class of productions which have been provoked by the English reception of Mrs. Stowe's work; it is not written in a denunciatory or fault-finding spirit; it is the cool presentation of an actual reality, undeniable and irresistible. The style is compact, vivid in description, terse in reflection. In view of both its manner and matter, we mistake if it does not produce something of a sensation in the country of which it treats."—*N. Y. Courier & Enquirer*.

"This work can scarcely fail to interest alike the politician, the professional man, the philosopher, the business man, and the day laborer, for the facts and principles it develops alike concern them all. Vivacity and vigor characterize both thought and style."—*Albany Atlas*.

"Those who expect to find the old story about castles and their appurtenances repeated in this book, will assuredly be disappointed. There is little in it which any other author has said or thought of. Facts entirely aside from common observation have been industriously gathered from the very life of England's down-trodden masses, and have been employed with effect in elucidating the character of British institutions. The book in fact may be considered a full answer to the questions—What is the chief end of Government? and how has it been fulfilled by British institutions? And yet there is nothing in it which a child cannot understand and be interested in. It is written in a good spirit, and cannot fail to interest persons of every class in the community."—*Boston Atlas*.

"This is the work of one who has visited the humble dwellings of the people of England, and conversed with their wretched inmates—who with singular unanimity ascribe their hard lot to unequal social and political institutions under which they live. The nature of those institutions is explained, and their influence traced out and the manner shown in which they tend to degrade the masses of the English people. The work is written in a sincere, kindly and truthful spirit, and develops a picture which it concerns the interest and welfare of every American citizen to examine."—*Evening Post*.

"This is not an ordinary book of travel. It abounds in incidents of travel, it is true, and they are such as the common observer never turned aside to see. Indeed, it can scarcely fail to strike the reader with delightful surprise to find so much that is new and entertaining on almost every page, in relation to a country which has been so much travelled and written about."—*Sacramento Republican*.

For sale by booksellers generally throughout the State.

D. APPLETON & CO.,  
Publishers, New York and London.

# GRAND RAPIDS NURSERY.

THE subscribers offer for sale at their nursery, situated one and a fourth miles east of Grand Rapids city, a large and extensive assortment of

## CHOICE FRUIT TREES.

Embracing Apple, Pear, Peach, Plum, Cherry, Quince, Gooseberry, Raspberry, Strawberry and Currants, of suitable size for transplantation: also a good assortment of

## ORNAMENTAL TREES.

Mountain Ash, Horse Chestnut, Alanthus, Willows and Altheas: also a very general assortment of ornamental shrubbery, vines and creepers, Bulbous flowering roots, perennial flowering plants and

## DOUBLE DAHLIAS!

all of which are offered on the most favorable terms. Their grounds embrace ten acres, and contain over one hundred and ten thousand trees of different ages. They intend to add every new and really desirable article from time to time to answer all calls. Orders promptly attended to, and trees packed to be conveyed any distance with safety.

BARKER & SMITH.

Grand Rapids, Jan. 3, 1854.

feb3m

# BLOOMFIELD IRON WORKS.

MANUFACTURE and keep constantly on hand and for sale Aaron Smiths Michigan Jointer Subsoil Plows of different sizes, got up in the best of style, and made of the best material, well polished and of the very latest improvement, together with the best Corn Planters, Cast Iron Grain Rollers, Hand Cider Mills, with Corn Shellers attached, and a variety of other farming implements. Also is manufactured different kinds of machinery, such as Steam Engines, Turning Lathes for Wood and Iron, Self-Feeding Hand Drilling Machines, &c., &c. In fact all kinds of machinery and castings can be made on short notice, such as may be wanted in this section of country, at

A. SMITH & SON,

feb3m

Iron Works in Birmingham, Michigan.

# PAWN RIVER MILLS FOR SALE.

THE mills are located in St. Joseph County, Michigan, near the line of the Southern Railroad, four miles south-west of Burr Oak station, and in the neighborhood of four of the great wheat prairies, to wit: Sturgis, Mousquomon, Pretty, English, being the best wheat section of country west of Lake Erie; and on one of the best streams of water in the west, (Pawn River.) The mill house is a good substantial building, with a heavy stone wall foundation—four floors. Has two run of stones, (a place for an other run,) two custom bolts, and a ches of merchants bolts, all in running order and in good condition. The mill, with about sixty acres of land, stone storehouse, a good and commodious dwelling house, with several cut houses, and a large horse barn, vegetable and fruit gardens. And one of the very best apple orchards in bearing for several years, all grafted with very choice summer, fall and winter fruits. My price for the above stated property is \$10,000. Part of the purchase money will be required on conclusion of a sale, the remainder can be arranged on easy terms.

I have large tracts of land adjoining the mill property, which are also for sale, well calculated for the stock, dairy, wool growing and farming business. Persons wishing to purchase will please address me, or call upon me at Monroe, Mich., my present place of residence. feb2t

PHILIP R. TOLL.

## SANDER'S

# IMPROVED VIBRATING HORSE RAKE,

Patented June 8th, 1852.

THIS Rake is one of the great improvements of the age. It is carried upon wheels and the operator rides while raking. It can be operated by either man or boy, and will rake either hay or grain where any other horse rake can be used. The subscribers having purchased the right to manufacture and sell Sander's Rake in Leapeer County, would respectfully announce to the farmers of Leapeer, that they will constantly have on hand at their shop in Hadley, a supply of rakes which they will sell on reasonable terms.

DAVID MILES & J. H. HEMINGWAY.

Hadley, January 14th, 1854.

# HOVEY'S MAGAZINE.

On the first of January will be published the first number of the twentieth volume of

THE Magazine of Horticulture, a monthly journal of horticultural science, Landscape Gardening and Rural Art. Edited by U. M. Hovey, author of the Fruits of America. Volume 19, just completed, bound in cloth, \$2.50. A few complete sets, in nineteen volumes, \$2.00 each. The magazine is entirely devoted to the diffusion of information in every department of horticulture. And to facilitate cultivators in their labors, a Monthly Calendar of Horticultural Operations, given in detail, and adapted to the wants of amateur cultivators, reminding them of the routine of operations which are necessary to be performed in the Fruit Garden, Flower Garden, Ornamental Grounds, Greenhouses, Grapery and Kitchen Garden through the varying seasons of the year. In fine, giving all the information which the amateur or the country gentleman requires to manage successfully the smallest or largest garden.

In the past nineteen volumes, more than five hundred drawings of the newest and finest fruits have appeared, many of them in no other work, and upwards of fifteen hundred other engravings, illustrating the great variety of subjects treated upon. No pains will be spared to render the magazine what it has heretofore been,—the most valuable horticultural periodical extant.

Terms, \$2 00 a year, in advance. A liberal discount to agents. Address

HOVEY & Co., Boston, Mass.

## IT NEVER FAILS.

# NEWTON'S FEVER AND AGUE REMEDY.

A safe, pleasant and never-failing Remedy, for

## FEVER AND AGUE,

Bilious Fever, Chill Fever, Intermittent or Remitting Fever, Bilious Headaches, Indigestion, and all other forms of Disease arising from the causes which usually produce Fever and Ague.

THE co-partnership of Travers & Newton having been dissolved, Travers & Newton's Fever and Ague Mixture and Pills will hereafter be put out by me, in my own name, with the addition to the medicine of a powder, which is to be dissolved in water and taken when the fever is on. This perfects the medicine, and renders it at once SAFE, EFFICIENT, and RELIABLE.

The materials of which this medicine is composed are selected with care, and are all known to be of the best quality, and perfectly pure; and the manufacture is carried on under my own immediate supervision.

The directions hereafter will be printed in pamphlet form, and more full; and one of the pamphlets will be wrapped around each bottle, inside of the label.

As an exterminator of that bane of all western climates, the Fever and Ague, this medicine has proved superior to any as yet offered to the public.

## TESTIMONY,

without measure, might be adduced in its favor, but is deemed unnecessary. A trial is what is desired.

Price reduced to one dollar per bottle.

For sale in Detroit by T. & J. Hinchman, and in the country by druggists generally. R. C. NEWTON, Port Huron, St. Clair Co., Mich.

# Battle Creek Iron Works.

MANUFACTURED and kept constantly on hand and for sale R. T. Merrill's Double Milled Separators.

These separators have in every instance taken the premium where they have been exhibited. They have been thoroughly tested and are not equalled. A large number of certificates might be given to this effect; a few of many will only be offered.

Mr. R. T. MERRILL.

DEAR SIR:—Feeling that I am under obligation to you and to the farming community generally, I sit down to make known to you the results of the operation of the machine I purchased of Brown & Wilcox, of Battle Creek, Mich. I can now say that your Double Milled Separator is decidedly the best I ever saw, both for durability and for doing the work fast and saving grain. I have threshed and cleaned fit for market, three hundred and fifty bushels of wheat in less than five hours, and have threshed and fitted for market one hundred and twenty bushels in one hour, and can thresh and fit for market from five to seven hundred bushels per day with eight horses, and not worry them. I have threshed for several years, and never found a Separator that would do it up as fast as it could be threshed, without wasting the grain, until I procured the one from Brown and Wilcox, last summer.

Yours truly,

S. P. CADY.

TO WHOM IT MAY CONCERN.

We do hereby certify that we purchased of William Brown, Battle Creek, Mich., in July, 1853, one of R. T. Merrill's Double Milled Separators, and have used the same through the season of threshing, and we do say without any fear of successful contradiction, that it cannot be equalled in this country for doing the work fast and perfect, and not waste the grain. We have used the Pitts, and the Rochester, and the Fowlerville machine, and have followed threshing for eight or ten years, having used six or eight sorts of machines. We have in no instance had or seen a machine that could be compared with the Double Milled one above referred to, not only for doing the work fast and well, but also for durability and ease for the team.

Jackson, Nov. 15, 1853.

STEPHEN HERRINGTON,  
MORRIS HERRINGTON,  
C. R. HERRINGTON.

TO WHOM IT MAY CONCERN.

We are willing to certify that the machine we purchased of Wm. Brown, of Battle Creek, Mich., this season, is one of R. T. Merrill's Double Milled Separators, patented April 8, 1851, and is the most perfect machine for durability, doing the work fast and perfect, and not wasting the grain that we ever have seen. We have used the Pitts and other patents, and they are not to be compared with the Double Milled Separator. We can fit for market and not waste the grain, one bushel per minute; and thrash and fit for market, from 1800 to 2500 bushels per week; and have used this machine for six weeks, and expended only one shilling for repairs in the time, and that for one tooth.

Liberty, Sept. 3, 1853.

GILBERT RHOADS,  
LEWIS RHOADS.

I am also manufacturing and keep constantly on hand several sorts of

# HORSE POWERS

of the most approved patterns, and a great variety of Agricultural implements, such as Star Bucks Plows Nos. 4, 5, 20 and 21. A. Smith's, Jointer Plow; Curtis' Iron beam Plow, Nos. 4 and 12.

Breaking up Plows, Nos. 4, 5, 6 and 7; Corn Shellers, Mill Castings, Sleigh-shoes, Groves in variety, and Irons, Wagon-boxes, and

# MULEY IRONS FOR SAW MILLS,

all of which will be sold at the lowest possible rate for cash, or exchanged for Pine or Whitewood Lumber, Shingles and Produce.

Battle Creek, Dec. 23, 1853.

WM. BROWN,  
By R. T. MERRILL, Agent.



## "NO WAR, NOR BATTLE SOUND!" BUT PENSIONS, BOUNTY LANDS, &C.

ALL widows of all officers, and all soldiers of the Revolutionary war, are (by an act of Congress, approved Feb. 3, 1853,) entitled to a pension "for life" of the same amount their husbands drew or would have drawn had they applied. Heretofore, none were entitled only those married previous to January, 1800. Widows and orphans who have drawn FIVE YEARS' PENSIONS, under Act of July 4, 1836, July 21, 1848, and Feb. 22, 1849, are entitled to "FIVE YEARS' ADDITIONAL PENSIONS." And all widows and orphans (under 16) who have lost a husband or father in any war since 1790, are entitled to five years' pension (if not received.) Every officer and soldier who has at any time been wounded, or in any way disabled, in the service of the U. S., and in the line of his duty, is entitled to Pension for life, according to the degree of his disability.

BOUNTY LANDS—Every officer and soldier who have served as long as "ONE MONTH" in any war of the U. S. since 1790, is now entitled to land, if he has not received it.

Applications for Pensions, Land, or pay of any kind, will receive prompt attention by application by letter or in person to

DAVID PRESTON & CO., Detroit, Mich.

P. S. We BUY and SELL 160, 80, and 40-acre warrants, and pay best rates. ap 53 ly

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A LARGE stock of the above, comprising nearly all the standard varieties of Fruits, and most of the novelties in the ornamental department.

The assortment of Shrubs is very complete, including all that is really desirable.

The collection of Dahlias is one of the best in the country, and contains the best of the varieties at the English Exhibitions, the past season.

Pom-pone Chrysanthemums, a beautiful selection of these new favorites. See Horticulturalist for March.

The first premium was awarded the undersigned at the last State Fair held in this city, for the best collection of Roses, Dahlias, Philoxeras and Verbenas.

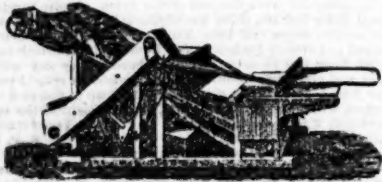
All orders through the Post Office, or left at the store of F. F. Parker & Brother, will be promptly attended to.

Catalogue gratis on application.

WM. ADAIR, Detroit, Mich.

## AGRICULTURAL IMPLEMENT MANUFACTORY,

Cornet of Carolina and Third Streets, Buffalo, N. Y.



## PITT'S PATENT SEPARATOR,

IMPROVED DOUBLE PINION HORSE POWER.

PITT'S CORN AND COB MILLS, &c.

I HEREBY give notice, that since the extension of the Patent Right on my Machine for Cleaning and Threshing Grain, I have removed to Buffalo, N. Y., where I have permanently located and erected a large establishment for the future manufacture of the above machines.

The Separator has been enlarged, improved, and rendered more permanent and durable in all its parts; while the Horse Power, for strength, durability and cheapness of repair, is not surpassed by any in the United States. This Power is warranted to withstand the full strength of eight horses; also, to give as much effective or useful power when driven by one or two horses as any other Horse Power, whether constructed on the Endless Chain or Lever principle. It was put on trial at the great exhibition of Horse Powers and Threshing Machines, at Geneva, in July, 1852, where it received the N. Y. State Agricultural Society's first premium "for the best Horse Power for general purposes."

The Separator, at the same trial, also received the Society's first premium. My machines will thresh and clean from three to five hundred bushels of wheat per day, and other grain in proportion.

Two hundred of the above machines are for sale at the Agricultural Works of the Subscriber, in this city, all warranted to be a better article than can be purchased at any other shop; and if they do not on trial prove to be so, I will take them off the hands of the purchasers at the price they may pay me for them.

I further notify all persons who are purchasing Horse Powers and Separators to be used in California or Oregon, that I will hold them accountable for any infringements of the rights secured to me by Letters Patent in the above machines, as I am manufacturing a Horse Power and Separator expressly designed for that section.

All orders for the above machines hereafter addressed to John A. Pitts, Buffalo, N. Y., will receive prompt attention.

JOHN A. PITTS, Buffalo, N. Y.

Wayne, above machines are for sale at Detroit, Mich., and Fort The Indiana. June-1853

## NEW YORK CHEAP JEWELRY STORE.

NO. 55 WOODWARD AVENUE, DETROIT.

L. P. DURKEE & CO., successors to (H. B. Marsh,) wholesale and retail dealers in

WATCHES, CLOCKS, JEWELRY & FANCY GOODS, have just received and opened, a splendid assortment of Gold and silver Watches, Silver Ware, Jewelry, Clocks and Fancy Goods, which will be sold cheaper than the cheapest.

Watches and Clocks repaired and warranted. Mar'53-ly

## SMITH & TYLER,

MANUFACTURERS and Dealers in Boots, Shoes, Rubbers and Findings, Corner of Woodward Avenue and Larned Street, Detroit, Mich. n.

We intend to have on hand at all times a full and complete assortment of goods in our line, both of our own and Eastern manufacture.

Mr. Smith gives his personal attention to all work of our own make, and we use the best leather to be had in the market, and therefore believe there is not better work made in the State, than we are getting up.

We invite all wishing to purchase Boots and Shoes to examine our Stock and prices before buying elsewhere, as we shall use our best endeavors to give entire satisfaction.

Remember our stand is corner of Woodward Avenue and Larned Street. Jan-lyr SMITH & TYLER

## BOOKS AND STATIONERY.

RICHMONDS & BACKUS would call the attention of their friends and the public to their large and well selected stock of

## BOOKS AND STATIONERY,

which have been selected with great care, both as to quality and price, which we now offer at as low rates as can be sold in this market.

Our stock of paper is very large, enabling us to furnish Counties and Banks, Merchants and Shippers, Lawyers and Doctors, Mechanics and Farmers, with every style of Paper and Blank Books required to conduct their respective business.

We have increased our material and facilities for binding Music, Periodicals, Miscellaneous and Old Books. All work done promptly, and with neatness surpassed by none.

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## New Book and Stationery Establishment.

KERR, DOUGHTY & LAPHAM,

PUBLISHERS AND IMPORTERS,

DETROIT, MICH.,

WOULD respectfully announce to the Book Trade in Michigan, Ohio, Indiana, Illinois, Wisconsin, and Canada West, that they have opened a Publishing and Importing Wholesale Book and Stationery House in this city, where may be found at all times a full stock of School, Miscellaneous, Law, and Theological Books, Standard Works, &c.

Also a full and complete assortment of English, French, German and American Stationery, Letter and Cap Papers, and all articles in their line, including Blank Work, Slates, Ink, &c.

From our advantages in publishing, we can procure our stock in exchanges with other publishers, and are enabled to sell at exactly Eastern prices, thus saving to our customers their freights from Eastern cities.

To Booksellers, Country Merchants, Pedlars, Colporteurs, Book Agents, and Teachers we will only say, try us, and we will satisfy all that we can furnish goods on as favorable terms as any house in the country.

July

KERR, DOUGHTY & LAPHAM,  
Young Men's Hall, Jefferson ave., Detroit.

## FRUIT, ORNAMENTAL TREES, &c.,

THE subscribers offer for sale this spring, a large assortment of Fruit Trees, Ornamental Trees, Shrubbery, Flowering border Plants, Roses, Bulbous Roots, Asparagus, Pie Plant, Strawberries, Raspberries, etc., upon the most reasonable terms, and they urge upon those wishing to purchase, to call upon them before purchasing elsewhere, as they feel disposed to sell very low. They have a large amount of Trees in a bearing state.

Also—Evergreens, of large size. They are also importing an extensive assortment of Seedling Evergreens, Nursery Stocks, Ornamental Trees, Shrubbery, Roses, &c., a portion of which will be offered to the trade.

Our Nursery is situated two miles from the City Hall, down Fort street. We are publishing a new catalogue, which will be ready for delivery soon after the first of March, and which will be supplied gratis to all post-paid applicants, enclosing a stamp, or upon application to the store of M. H. Webster, Jefferson avenue, or to the store of Hiram Walker, Woodward avenue, Detroit, and at this office.

Trees packed in the best manner and delivered in Detroit, at any place designated; no charge for delivery.

Detroit, February 8, 1853.

HUBBARD & DAVIS.

## ANN ARBOR PAPER MILL.

LUND & CHAPIN, manufacturers of Book, Printing Wrapping Paper. Paper of any size and weight made to order on short notice. All orders will receive prompt attention.

J. H. LUND.—Ann Arbor, Feb. 9, 1853.—ly

C. A. CHAPIN.